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DEVELOPING MARITIME STANDARDS
FOR THE
PRESERVATION AND RESTORATION OF LARGE MUSEUM SHIPS

Monday, September 2, 1985

Volume I
Pages 1 - 230

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1 MONDAY, SEPTEMBER 2, 1985

9:00 O'CLOCK A.M.

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3 MODERATOR McGRATH: I'd like to begin Session
4 1. Lynn Hickerson, from the National Trust, asked to
5 introduce Peter, so I'd like to ask Lynn to make a few
6 comments, then we will begin Session 1 with Peter
7 Neill.

8 MS. LYNN HICKERSON: As many of you are aware,
9 the National Trust for Historic Preservation put
10 together the Maritime Heritage Task Force about three
11 years ago, which finished its work last year about this
12 time, and concluded that setting up a system of
13 standards and guidelines for maritime preservation was
14 one of our most important priorities.

15 Needless to say, we need standards in all
16 categories and areas of maritime preservation. This
17 past year, we did do a survey, which is in your
18 notebook, to see what standards are already out there
19 that could possibly be construed to being relevant to
20 maritime. It is true that the largest, most gaping
21 hole is that for large ship preservation. Once we get
22 going with standards and guidelines for museum ships,
23 we will be able to take care of large, non-museum
24 ships.

25 A note of optimism. I think that points to

1 one of the most important reasons for having standards.
2 If we can do this, I think we will be able to attract
3 commercial sponsors for some of these large projects,
4 which is how we are going to be able to get
5 preservation accomplished. That is how house and
6 building preservation has been accomplished over the
7 last 20 years, through attracting commercial sponsors.
8 We slept in one last night, which was one of those
9 large projects which probably would not have gotten
10 done without the economic incentive of the tax act.
11 And surely if it's possible to save the tax act for
12 preservation, certainly it makes sense to extend that
13 to maritime resources.

14 Just as an example of why that is on my mind.
15 I was up in Seattle where, as many of you know, they
16 have an old ferry boat, San Mateo. Apparently, the
17 McDonald's Corporation has expressed an interest in
18 restoring that vessel, if they can figure out where to
19 berth it. If we had the standards and guidelines all
20 set up, we would have the kind of control necessary to
21 encourage a commercial sponsor like that, and that
22 vessel could be restored.

23 There is so much to do. There is so much work
24 to do that it is extremely gratifying that the National
25 Maritime Museum has seen fit to get started. I

1 anticipate that, as Glennie was saying before, all
2 these questions have come up for the rest of the
3 preservation field 10, 20 years ago, and we will be
4 going through the same process. I would expect that we
5 would be meeting like this many more times, and we all
6 have to pitch in. I don't think that any one
7 organization is going to simply declare standards for
8 maritime preservation. They will evolve over time as
9 we brainstorm with everybody contributing their
10 expertise and finally coming to a consensus on
11 standards.

12 So, standards for preservation are clearly an
13 integral part of developing a national cultural policy
14 for maritime preservation. That is what Peter will
15 discuss. When this project was being planned, Peter
16 was Director of Maritime Preservation for the National
17 Trust. He is now president of South Street Seaport, as
18 most of you know, and where he still has this on his
19 mind, maybe even more so, now that he has all those
20 ships to worry about.

21 MODERATOR McGRATH: Thank you, Lynn. Now I
22 would like to begin Session 1 and introduce our first
23 speaker, Peter Neill, who is the Director of South
24 Street Seaport Museum. Peter is going to discuss and
25 talk on "A National Cultural Policy for Maritime

1 Preservation."

2 MR. PETER NEILL: Good morning. This is an
3 auspicious moment. My specialty in these types of
4 conferences apparently is to impersonate other people
5 from the maritime preservation field. Some of you who
6 were at the National Trust Conference in Baltimore saw
7 me do it once before, the consequences of which earned
8 me the opportunity to become director of the South
9 Street Seaport Museum.

10 This morning I get to impersonate Karl Kortum,
11 who is a contrary kind of fellow and for whom I have
12 the greatest respect. Since I am a contrary kind of
13 fellow too, it's going to be pretty simple for me to
14 begin this exercise by attempting to strip away the
15 veneer of self-congratulation that has crept into our
16 introductions and begin to talk about the realities
17 which face us, which are dire.

18 Those of us -- and all of us in this room have
19 this responsibility who are charged with the realities
20 of preservation of large ships -- realize that we have
21 not come of age and that we are confronted with myriad
22 problems and that we are really nowhere near their
23 solution, from my point of view. Maybe that is just my
24 frustration of the moment crying out for help. But
25 also being confronted daily with a historic fleet, I

1 realize just how poor is the state of the art.

2 Glennie used the word "dialogue." I think
3 that is exactly right. This is a curious kind of
4 meeting, because some of us will stand up here and some
5 of you will sit down there. And that implies
6 professor-student, but, of course, that has nothing to
7 do with it at all. I hope that the discussions will be
8 very animated and that you will not hesitate to stand
9 up and say that my particular remarks were useless and
10 without any base whatsoever, and then tell me why and
11 what to do about it.

12 FROM THE FLOOR: Don't worry, Peter,

13 MR. PETER NEILL: Thank you very much. I knew
14 that would happen. The charge is to talk about a
15 national cultural policy for wartime preservation. I
16 think in fact we are part of a predictable process. If
17 you stood back as a sociologist and looked at this
18 gathering, you would understand that this has been done
19 before in all different kinds of other disciplines. We
20 are comparable, as Glennie suggested, to the
21 preservation of historic structures some ten or fifteen
22 years ago. If you recall the situation ten or fifteen
23 years ago, it confirms my thesis that times were
24 desperate.

25 It's incomparable in a sense that we've got

1 to, I think, really build our self-confidence. I think
2 these meetings do that well. They allow us to
3 constantly educate ourselves and our constituents
4 concerning the relevance of our works and the artifacts
5 that we preserve. We are yet, I think, to be
6 absolutely convinced that what we do is as important as
7 landside preservation. It's a feeling I have, and I
8 really think it comes from the fact of having to
9 apologize so frequently. People who come aboard the
10 ships and see them in states of disrepair can see it in
11 our eyes when we talk about it, because they know that
12 we know that they know that we know that they know that
13 the job is not as well done as it can be and as it
14 should be.

15 Also, in every speech I ever make like this, I
16 always like to repeat one point, because I think it
17 really is extremely important, that we remember that
18 what we are involved with transcends artifacts; that
19 while these things are extremely important realities,
20 they represent skills and values which are inherent in
21 the national maritime tradition and which have a true
22 importance in terms of the present and the future. So,
23 I always like to start any kind of program which
24 addresses the "how" question -- how do we preserve --
25 with a remainder that we should first know why we

1 preserve.

2 The history of maritime preservation falls
3 into phases. You can divide it any way you want. I
4 think the first phase, I call it the "acquire and
5 acquire at any price" phase. That was simply the
6 recognition by a very, very small number of people
7 around the country that we were about to lose what was
8 an extremely valuable part of our heritage and
9 patrimony. We know the names. Thank goodness they're
10 still with us. And they really have been responsible
11 for the existence, the very existence of many of these
12 artifacts that we are now dealing with. We owe them a
13 great debt of gratitude. I think we should never
14 forget the fact that without their passion and their
15 commitment, we would have simply lost it all.

16 The second phase is what I call "trial and
17 error," mostly error. I will be talking about various
18 institutions, a lot of which is gossip, a lot of which
19 is hearsay. Representatives of those institutions will
20 not take offense. But you must remember what Mystic
21 Seaport was like 15 or 16 or 17 years ago, where they
22 were making every mistake in the book. They now don't
23 make mistakes ever -- do they, Dana?

24 [Laughter]

25 MR. PETER NEILL: But the point is that we did

1 make many, many, many mistakes, and we have lost
2 vessels as a result of it. My own museum has not a
3 happy record. I am the first to acknowledge it. So, I
4 feel that we must acknowledge the fact that over the
5 years, despite all our good intentions and all that
6 passion and all that commitment, our first efforts were
7 characterized by some very public failures.

8 The third phase is a much more happy one,
9 where we began to essentially learn from our errors and
10 to begin to consolidate a working wisdom. And a second
11 thing happened as well, which I like to think of as a
12 generational thing, in which a second generation of
13 people who shared the passion and shared the commitment
14 began to essentially debrief those exemplars of various
15 maritime skills that were remaining and to acquire
16 their knowledge as voraciously as they possibly could
17 and to become kind of living witnesses to what was left
18 of the tradition. We began to have some wonderful
19 examples of restoration in the Charles W. Morgan, for
20 example, the third time around, and the Elissa, which I
21 think is a project of which all of us can be proud.

22 Another one jumps to mind, and I should
23 mention it quickly because my mind doesn't necessarily
24 go to military ships, but the Jeremiah O'Brien should
25 be added to that list, because when I visited her last

1 year, I was just astonished by the job that had been
2 done there.

3 This brings me to Phase 4, which I'd like to
4 call the institutionalization of success, but I am
5 being a little bit more morbid this morning, and saying
6 that essentially what we are trying to do now is to
7 come up with a kind of conventional wisdom, to be able
8 to institutionalize certain conventions that have
9 proven successful in various instances all around the
10 country. I think that is what this dialogue is really
11 attempting to do.

12 A little more history that is more factual, I
13 suppose. The OpSail '76 is frequently cited as the
14 moment in which maritime preservation crept into the
15 national consciousness. It transcended the interests
16 of buffs and became something that could appear, head
17 held high, on the evening news or on billboards or the
18 front of cereal boxes, if it came to that.

19 It did generate a congressional appropriation
20 of \$5 million, which was distributed, as you all know,
21 through the National Trust and the National Park
22 Service to -- and I have lost the litany. What's the
23 number of projects? 155 projects in 33 states -- and
24 which, through matching, injected \$12 million into the
25 restoration of maritime artifacts.

1 Thank goodness there was the money. On the
2 other hand, it may have done as much harm as it did
3 good. It began projects. Many a project essentially
4 started on a weak foundation. They took this large
5 influx of cash. Some couldn't even make the match,
6 some barely made the match, and therefore could begin,
7 but had no program for the ship beyond a beginning.

8 We raised expectations all across the country.
9 There was no continuity of funding. So, in my former
10 life as Director of Maritime Preservation for the
11 National Trust, as I went around to places, you would
12 constantly find the detritus, you would find what was
13 left after the money had passed through. And what you
14 found was pockets of frustration and work that needed
15 to continue and had not.

16 We now have a Congressional mandate as well.
17 Those of you who were in Baltimore last year
18 participated, some of you, in the intense political
19 discussions that resulted in language in the last
20 fiscal year's Congressional appropriation to the
21 National Park Service, which, I am sure, Glennie can
22 repeat by rote. I don't think I can. I think it
23 enjoined the National Park Service and the National
24 Trust and the maritime preservation community to
25 investigate standards and guidelines. The purpose of

1 all this was that if there was going to be additional
2 federal money to the National Park Service or anybody
3 else, that we better know or have answers to a series
4 of questions as to what is historic and, when it's
5 historic, what is the historic or the appropriate way
6 to do it. Essentially, how do we allocate the money,
7 according to what system? That is what this is today.
8 This begins that process. This is, I think, the first
9 step in trying, for the community, the maritime
10 preservation community, to signal back to Congress that
11 we are indeed embarked on that process.

12 I have my own feelings about that. I think,
13 quite frankly, that additional federal funding is very
14 possible, even in this climate. A lot of people
15 disagree with me, but they don't know any more than I
16 do. The fact is that last year, \$5 million was
17 appropriated for two lighthouses in the United States,
18 one at Cape Hatteras and one at Great Point Light in
19 Nantucket. Five million dollars to rebuild two
20 lighthouses -- there are lighthouse buffs in the
21 audience. I have to be careful. On the other hand,
22 that same \$5 million could have done the same \$12
23 million job that the first appropriation had done and
24 no one would have been the wiser for it.

25 So let's not be naive and think that we can't

1 be politically successful and that a new appropriation
2 could be generated.

3 I also think that it's important that this be
4 viewed as a community effort. The Park Service has
5 this charge from Congress to protect the cultural
6 resources of the United States, but there are nearly
7 600 or 700 other little organizations all around the
8 country that have some kind of maritime cultural
9 protection clause in their charter. The Trust has done
10 a survey of those, and you'd be amazed to see where
11 they are and what they are -- little libraries with
12 maritime collections, small groups of lighthouse
13 people, for example. There really is an enormous
14 constituency out there. And it has to be served. So,
15 I think that whatever we do and however we formulate
16 this process, we do it with the full community in mind.
17 It would be a great tragedy to do it any way otherwise.
18 That really, truly represents a national cultural
19 policy. I know that this event and all subsequent work
20 on this will be done in that spirit.

21 "A national cultural policy." What does that
22 mean and how do you do it? I think first you have to
23 formulate a justification that places maritime
24 preservation in the same context as the conservation of
25 fine arts and the preservation of historic structures.

1 We may be convinced of that. Other people are not.
2 Therefore, we have a fairly strong, broad educational
3 process that we have to undertake so that we have
4 allies.

5 Secondly, we must realize that maritime
6 preservation is a broad-based moment and that large
7 ships are only one aspect of it, that whatever we do
8 must also include small craft, the fine arts, the
9 maritime fine arts, documents, plans, sailing school
10 vessels, maritime skills preservation, et cetera. I
11 think that the only way that we are going to convince
12 people of the validity and vitality of the movement is
13 to draw the largest circle possible.

14 Thirdly, we must set out a complete system
15 that guarantees that we always retain the maximum
16 amount of data or value from any given state of
17 preservation. That is a complicated way of saying
18 something I'd like to talk about in a minute, but it's
19 a system that allows us to protect ourselves against
20 our own fallibility. I will come back to that.

21 We must put forward, if feasible -- and there
22 are people who don't necessarily think it's feasible --
23 the guidelines for restoration projects and begin to
24 translate our experience into suggested standards. My
25 own feeling about that is that before we begin to do

1 that, we ought to do case studies and that we ought to
2 take case studies and use them as the way of saying,
3 "Okay, this is the best of what we know now," and then
4 evaluate those case studies to be able to move to the
5 next step.

6 Some people disagree with me. Some people
7 think that we know enough now and that there are enough
8 people who know enough projects around the country that
9 you can begin to pick that out. I think it's a bit
10 subjective. I think it's a bit random. And I would
11 like to see the process somewhat more orderly, but
12 that's what we are here to discuss.

13 Let me return to that process or that system
14 that I talked about. It seems to me a very simple one.
15 It is certainly part of all the stuff that we produced
16 while we were at the Trust, and that is a kind of a
17 five-part process which begins with documentation. I
18 will just go through it. Documentation leads to
19 stabilization -- parentheses, "maintenance" -- which
20 leads to restoration -- parentheses "reconstruction" --
21 which leads to interpretation, which leads to
22 reproduction -- parentheses "replication."

23 Now, these are all the words, the buzz words,
24 and they will get talked about a lot as we go along.
25 But it's a format, and I should type it out and have a

1 slide and do all that stuff and show you what it is.
2 But documentation, stabilization, restoration,
3 interpretation, reproduction or replication. This
4 process allows us to assimilate our information in an
5 orderly fashion. I don't believe that we should do
6 anything to any artifact whatsoever until we have
7 documented that artifact. There is a comprehensive way
8 of doing that. If it's a large ship, it can be old
9 photographs, plans, oral history, the debriefing of
10 people who sailed her -- a whole series of documentary
11 evidence that is assembled around the artifact.

12 The next step of that is stabilization and,
13 slash, maintenance. I think it's a mistake to begin to
14 restore a vessel if the vessel is in a state of
15 destabilization. And, in effect, it's a waste of
16 resources. I would argue, and those of you who know
17 South Street will say, "Ah hah, we've got you now."
18 But I would argue that it would be reprehensible for a
19 maritime museum to spend a single dollar on a
20 restoration project until that artifact had been fully
21 documented and stabilized. Because if, for example,
22 you have documented the vessel and you lose her, at
23 least you have her shape, for example. You have some
24 sense of what she was. Fine. Now you've documented.
25 You now have the next step. You have stabilized. So

1 here, at least if you can't raise the money to restore,
2 you have made your best efforts to try to counter the
3 negative process. You have come in and said, "Here is
4 an issue of rot or here is an issue of replacement,"
5 but these are only done in the sense that they
6 stabilize the artifact, they do not restore it.

7 Then you have alongside that a comprehensive
8 maintenance scheme which allows you at least to hold
9 the line in some cases, not in all. But at least it
10 slows down this terrible tyranny of regression that all
11 of us are aware of day by day. I walk Pier 16 in South
12 Street every morning and I look and I realize that we
13 have lost ground. Overnight, ground has been lost.
14 And therefore, my dreams of restoring this vessel or
15 reconstructing that vessel really hinge more on being
16 able to develop the resources to document and
17 stabilize, and then I have created a process and a
18 momentum that allows me to go forward toward
19 restoration.

20 The restoration process itself is perforce a
21 kind of staged or step-by-step situation, and it
22 depends pretty much entirely on money. We could have
23 all the plans in the world. If you have no way of
24 funding it -- and volunteers, for example, are a way of
25 funding it -- you're kidding yourselves. So therefore,

1 to start something without the appropriate funding
2 process and the appropriate in-place is an error. And
3 there, too, the stabilization strategy compensates for
4 that. Because while you're waiting or while you're
5 raising the money, while you're waiting for the
6 lightning bolt to strike, you haven't lost your
7 treasure.

8 A couple of examples. The Lettie G. Howard at
9 South Street, which really needs a complete
10 reconstruction, the recommendation is essentially to
11 stabilize her, to cocoon, almost to pickle her in a
12 formaldehyde sense, put her in a bottle with a top on
13 and hold her that way until you're in a position to do
14 what is necessary.

15 I think of the interrelationship between the
16 Thayer and the Wawona, for example, in terms of
17 documentation, that the lines taking of the Wawona,
18 which will take place in Seattle this fall, has some
19 real bearing on the documentation issue of the Thayer.
20 Those two vessels complement each other, and they can
21 be seen as part and parcel of a documentation exercise
22 for that type of artifact.

23 The historic American marine survey, something
24 that all of us, I think, would like to see started
25 again, represents some of the best documentation that

1 was done ever in the country, if only for a very, very
2 brief moment.

3 Standards for restoration. The rest of the
4 presentors will spend a lot of their time talking about
5 that, and I am not going to go into it, except that I
6 have learned from practical experience the need for
7 having a level of purpose established for each vessel.
8 It was a wonderful exercise for me to sit down with the
9 people from White Elephant Management and talk about
10 each ship at South Street and be forced, as the
11 manager, to design the purpose of each vessel. Because
12 once that purpose was established, the whole plan for
13 preservation changed. If you had one sense of purpose
14 and you changed that to something other, that changed
15 the whole level of restoration. It changed the
16 dollars, it changed the time line, it changed the
17 historic interpretation. So there is a whole sort of
18 inter-connecting web of circumstance, planning and
19 dollars which surrounds this establishment of a purpose
20 for each vessel. That purpose could be to house a
21 restaurant, if that is what it has to be -- not my
22 favorite solution. It can be to be a static museum
23 ship. And it can be to sail again. These are the
24 obvious ones, but each one has an implication that goes
25 along with it.

1 I am compelled to say one thing about
2 interpretation and reproduction. Always interpret, at
3 least within context of -- well, not even within the
4 context of a maritime museum. I don't care really what
5 you are, it seems to me that if you are in possession
6 of a maritime artifact or any artifact, for that
7 matter, you're constantly charged with the
8 interpretation of that artifact to the public.
9 Certainly, if you're in a nonprofit, that is part and
10 parcel of your purpose and statement of being. We
11 don't do it well enough. We don't do it enough at all.
12 We don't do it enough. We don't do it well enough. It
13 requires a great deal of imagination. It doesn't
14 necessarily require much more money. My argument is
15 that energy and imagination don't cost a dollar more;
16 it's a question of the attitude that you bring to the
17 process. And interpretation is deadly in most maritime
18 museums. I think we really need to address that issue.

19 And finally, reproduction-replication. I know
20 Walter Rybka is going to talk about that, and I will
21 leave those thorny issues to him.

22 Conclusion. In a funny way, we have been
23 almost too successful, and I am contradicting myself.
24 But the fact is that all these little expectations, all
25 these little projects that are out there face us with

1 an enormous challenge. I don't know whether we can
2 meet it. I don't know whether the dollars are there.
3 I don't know whether the constituency is truly there --
4 although I am very optimistic about how large that
5 constituency is. We will need some kind of system that
6 will provide some order to what may well be a triage,
7 where we may lose things in order to save other things.
8 I don't know if that is going to be the case. I
9 certainly prefer to save it all if we can. But I think
10 we ought to acknowledge that danger and try to set up a
11 system.

12 Now, some systems exist. The National Park
13 Service has the National Register of Historic Places.
14 That is one that is in place. Just to be a little more
15 provocative, I am not so sure it serves maritime
16 interests very well. I think it has a bad case of what
17 in the college trade we call "grade inflation." I
18 think that there could be some changes in that system
19 which would improve it if that's the one we are going
20 to use.

21 The International Congress of Maritime Museums
22 has published a rating system for historic vessels,
23 which has been included in your packages. That is a
24 second possibility. The National Trust, as part of the
25 National Maritime Heritage Survey last year, asked

1 White Elephant Management to come up with a third
2 alternative, and that is going to be duplicated and
3 circulated to you. The fact is that it doesn't matter
4 which one it is. I don't really care, as long as it's
5 a system that we can all agree upon, that is
6 comprehensive and practical, and really does make the
7 kind of judgments.

8 And then finally, there is going to be a
9 fourth system, which is the free market system, which
10 is simply: No matter how historic the vessel is, if it
11 doesn't have a constituency and leadership that is
12 strong enough to capitalize upon that historicity and
13 turn that into dollars and success, it's not going to
14 make any difference at all. Witness the Wawona, for
15 example, the first vessel, I think, ever to be put on
16 the register, and sitting there rotting a slow,
17 tiresome, tragic death in Lake Union.

18 So, we can come up with all the systems in the
19 world and it won't make a bit of difference if we don't
20 have the people and the personalities and the expertise
21 with which to address the issue.

22 I think that is where I want to end. I want
23 to end with the fact that, as important to the process
24 as the thing itself, are the individuals who are
25 involved. It's my own feeling that we must do

1 everything we can to train, to broaden what is the
2 second generation of maritime preservationists, and to
3 train the third.

4 And so, when I hear Glennie talk about museum
5 training programs or training programs for maritime
6 museum professionals or when I see Mystic Seaport
7 turning out magnificent craftsmen who then go on, at
8 the North End Yard in Maine or come out here to work in
9 the trades, I am very encouraged.

10 On the other hand, I have jobs. And anybody
11 who is looking for one, see me later. The fact is that
12 it's hard to find, it's hard to find people who
13 understand the needs and demands of museum ships, who
14 have the skills, and who have the willingness to work
15 those long hours at those low wages. But that has been
16 the story of maritime preservation. It's always been
17 vital. I wouldn't be in this business if I didn't like
18 all the people in it. I really haven't met a jerk yet
19 in maritime preservation, and that's a polite term. I
20 met a lot of opinionated people.

21 [Laughter]

22 MR. PETER NEILL: But that is different. I
23 like opinionated people. But it's that kind of
24 continuity or community that really is going to make
25 all our attempts to institutionalize feasible.

1 Thank you.

2 [Applause]

3 MODERATOR McGRATH: Thank you, Peter. I'd
4 like to hold any discussion of Peter's remarks for just
5 a moment.

6 MODERATOR McGRATH: It's with great pleasure,
7 despite the fact that I sent him to the other side of
8 town -- he did manage to find where we are. And I'd
9 like apologize, Karl, for that. We are glad you're
10 here.

11 I'd like to introduce Karl Kortum to you all,
12 the Chief Curator of the National Maritime Museum.

13 [Applause]

14 MR. KARL KORTUM: Well, I arrived at the
15 Palace Hotel this morning and spread out my notes and
16 looked over the audience and didn't see a familiar
17 face, and I knew something was wrong.

18 [Laughter]

19 It's his fault. It is his fault.

20 [Laughter]

21 I enjoyed Peter Neill's wise remarks, remarks
22 springing out of wisdom and experience very much, and
23 there are similarities to my reactions to this subject.

24 Why do we save these ships to start with? In
25 my case, I like to look at them, for one thing. That

1 is kind of a selfish viewpoint. I think a much deeper
2 instinct on my part and many others is one described by
3 President Theodore Roosevelt, that the mark of a
4 civilization is the care and thought they devote to the
5 next generation, the people that are going to come
6 after you. I know, myself, I have a strong instinct in
7 that direction, to save these ships for people I will
8 probably never encounter.

9 But probably the reason that mostly motivates
10 me is that I love the subject. I think that ships are
11 a marvelous vehicle for a host of things. They convey
12 art and literature, or art and literature attach
13 themselves to ships in various ways at different times
14 and different degrees, and geography and history and
15 psychology. Read that marvelous book -- I just read it
16 again, "The Nigger of the Narcissis," if you want to
17 see a study in shipboard psychology. Joseph Conrad's
18 artistry comes through in a sea setting that is
19 incredible. It is just the way it is on a sailing ship
20 voyage.

21 And many other ramifications spring out of
22 ships or can be attached to ships. So, they're a good
23 starting base, a good starting vehicle. I have never
24 found them wanting the many tentacles that they can
25 send forth.

1 So, for that reason, that they're so
2 engrossing and have so many ramifications, I like to
3 tell other people about how great they are. This can
4 be described as missionary work. It's been described
5 that way. I have been described as a missionary. I
6 don't know if that is complimentary or not. But they
7 can tell a story. They're a vehicle for missionary
8 work. And to be that, to reach out and tell the story
9 that I find engrossing, and I think other people will
10 too, now and in the future, they have to be
11 interpreted.

12 The simple fact is that in the old ship
13 program in this nation and basically worldwide,
14 interpretation is pretty bad. It's seldom carried out
15 to the extent that it should be. It is a sad thing to
16 me that the down-easter St. Paul, a noble ship built in
17 Maine, which was up in Seattle in the 1930's, and the
18 Benjamin F. Packard, which had been moved around to
19 Long Island Sound, are the last examples of the
20 down-easter, the ship that succeeded the clippers, the
21 real American square-rigger, were both largely -- not
22 entirely -- but largely lost because of human
23 indifference, public indifference.

24 I attribute that in very large part to the
25 fact that the ships were not interpreted. The level of

1 interpretation in those years was to tell the night
2 watchman, "Charlie, get a couple pieces of seizing wire
3 and make out a little sign to say 'Captain's Cabin' and
4 hang it up there somewhere." Or similarly, "Charlie,
5 make a little sign for the galley for people who don't
6 know what it is." That was the level at which it stood
7 pretty much across the world until we did the Balclutha
8 in a different fashion. We had a tough time with the
9 Balclutha. She is now a warmly regarded object and a
10 success and all this. But it was very tough going. It
11 was very tough to get the board of trustees to buy that
12 old wreck laying over in the mudflats of Sausalito. It
13 was tough to bring her back to life and into a
14 ship-shape condition or the appearance of a ship-shape
15 condition. It was tough to raise money for the vessel,
16 a subject I will get to a little later. We only
17 raised, in spite of marvelous publicity, I think about
18 \$40,000 on a job that would be a \$250,000 job if you
19 paid for it at going rates. So I asked the board of
20 trustees for a quarter of that to create displays.
21 They were a little skeptical because the ship was in
22 such bad shape -- they needed the money for that. We
23 got her repaired. There was one hole in her side big
24 enough you could stick your head through and look
25 around outside, just plain rusted through, and there

1 were at least a hundred smaller holes in that ship.

2 So the shipping people on the board naturally
3 favored patching up the ship above this peculiar
4 activity of creating exhibits. But I insisted and
5 designed some exhibits and did some research, which was
6 very pleasurable, writing to England and finding
7 old-timers that had sailed in, actually had sailed in
8 the Balclutha, through Sea Breezes magazine. This is
9 back in 1954. I assembled an exhibit plan. Harry
10 Dring came to work for us. He was down in the basement
11 building these displays for the best part of the year
12 that we repaired the ship with weekend volunteer
13 groups.

14 We did have one great break. The labor unions
15 did come forward and offered to help, and they were
16 very steady. The interesting thing is that they
17 enjoyed it when the ship was finished. A year later,
18 they were plainly sorry to see it all over. They liked
19 coming over on Saturday to work on the old ship.

20 About three weeks before the conclusion, we
21 trucked all these displays that had been created during
22 the year over to Oakland and installed them in the
23 vessel. The lighting had been installed in advance in
24 the repair process. So, when that ship came over and
25 tied up in the San Francisco waterfront, it was a

1 floating museum, floating maritime museum. There were
2 three levels, three decks of exhibits, and the ship was
3 extensively interpreted in fo'c'sle, in cabin, and
4 'tween decks and lower hold. The \$10,000 had been well
5 spent and carefully spent.

6 So, right from the start, the public went
7 aboard, and they didn't see a sign that Charlie the
8 night watchman had made hanging from a piece of seizing
9 wire saying "This is the galley," or "This is the
10 Captain's cabin." They saw cast bronze dolphins
11 holding up elegantly lettered little panels telling
12 this aspect of the ship or that.

13 She was a success right from the start. The
14 word of mouth in the city was favorable, favorable.
15 "It's worth going to see." I remember a couple of
16 elderly ladies from out of town coming down the
17 gangplank. I happened to be there. One of them said,
18 "That's the best 25 minutes in San Francisco."

19 So, that is my pitch on interpretation. It's
20 seldom done. It's still seldom done. It's always
21 coming along in arrears to the physical repair of the
22 ship, which is understandable to some extent. But
23 unless you can project the story of that vessel out to
24 the public, you're not going to have the public support
25 that Peter Neill just stated is so necessary. You're

1 not going to have the constituency unless you tell the
2 story, make the ship come alive and her history -- what
3 a wonderful one in the case of Balclutha and wonderful
4 in the case of many other excellent vessels -- unless
5 you get that story projected.

6 Now, there can be a couple of philosophies on
7 interpretation. I favored that one for that ship
8 because she is a steel ship. When you are inside her,
9 it's not much different in the 'tween decks than being
10 inside a liberty ship. It's just a steel, cold
11 interior. So, there is lots of stuff to look at, lots
12 of stuff to read.

13 The captions are long. I remember Newton
14 Drury, the former Chief of the National Park Service,
15 then head of California's park service, came by and
16 said, "Karl, your captions are too long. You've got
17 too much writing here." I say, "Well, Newton, you're
18 right. But I can't restrain myself. It's such good
19 stuff that I have to put it down and get it out before
20 the public."

21 Well, with no planning in the process, that
22 worked to our advantage, because it gave the ship
23 something else, which is depth. The public couldn't
24 absorb and couldn't read all the stuff I had put out
25 before them the first time around. So, being Americans

1 and being out of the Protestant ethic and having a
2 strong instinct to educate themselves, they had a
3 guilty feeling that they should come back and read some
4 more. They would bring their friends frequently on the
5 second occasion. Whether they read it all then, I
6 don't know. But anyway, that happened to work in that
7 fashion.

8 Now, there are other ways to do it. A wooden
9 ship has to be treated, in my opinion, in a different
10 fashion, probably clustering the interpretive material
11 at one point, more or less as we have done with the
12 Thayer, which we also designed, although that probably
13 could be improved upon. Because the construction of a
14 wooden ship is a different story altogether. It's
15 something to see. It's not like being inside a liberty
16 ship at all. It's marvelous to see the creations of
17 those long-gone shipwrights. To some degree, to
18 display material takes away from that dignity and
19 interest. That is all I can say on that; the
20 clustering of the material is about the best solution.

21 I strongly believe in visual material. I am
22 known not to have much interest in these little white
23 wands that people carry around. I believe it goes in
24 one ear and comes out the other. Because the ship
25 itself is a visual thing. You're in a visual mode.

1 When you go aboard and see the written material and
2 pictures telling the story of that ship's life, there
3 is a certain logic to that, a certain large logic. You
4 are going visual all the way.

5 There is another method still, which is to
6 have docents. And docents have their virtues and have
7 their shortcomings. One of the finest museum ship
8 experiences I ever had was with Lord Nelson's Victory.
9 There was a skilled docent there. He took the party
10 through the ship and he told her story. It was very,
11 very well done. It was a good experience. Its
12 disadvantage is that it doesn't stick with you quite
13 the way visuals do.

14 So maybe the thing to do is to have a visually
15 developed ship with displays somewhat like the
16 Balclutha, and I am not saying the Balclutha couldn't
17 be improved, but moving in that direction, and then
18 have a docent who runs over the thing and takes you
19 around the ship and then says, at the end of it, there
20 is infinitely more in the written material and
21 illustrative material, and if you want to take time, I
22 suggest you go around again and absorb this. That
23 would seem to me the best of two possible worlds.

24 On a different subject altogether, and Peter
25 Neill has reflected on this, too, we have just passed

1 through what I call the romantic era of ship
2 preservation. "Let's get this old vessel. Let's not
3 let her perish." You can drum up public support for
4 that. Old ships, as most of you have found, gain
5 publicity -- it's incredible the way you can get into
6 the papers with them. The press just loves old
7 vessels, and television seems to get a kick out of
8 them, too. Roughly speaking, it's about as easy to get
9 publicity for old ships as it is hard to get money.
10 There is no real relationship. It's a very disturbing
11 thing when you come up against that fact, that here
12 you've got a big buzz going for the ship in the
13 newspaper and on television and so on and you've got
14 practically no dollars coming in. There is very, very
15 little correlation. There is an awful lot of kidding
16 one's self -- I have done it myself -- that, "Gee,
17 we're getting a lot of attention for this old girl, and
18 things are going fine." Well, they are not going fine
19 until the money part is addressed.

20 But we have ridden on this wave which I call
21 the romantic period in which, with press, and
22 frequently or almost invariably with dedicated
23 individuals, by some formulation, frequently not
24 involving too much money, the ship is saved. And, "Oh,
25 we have saved the ship," and the romantic thing has

1 been done. And it has. A very solid thing has been
2 done.

3 But then we move into a different phase
4 altogether, different era -- it's the one we are in
5 now -- which is an economic one. It's the opposite of
6 romantic, because raising money to keep a ship going is
7 not a very romantic endeavor, doesn't have much public
8 appeal. "We need money to scrape the bottom" is not
9 exactly a ringing cry. As a result, this money comes
10 very hard indeed. I don't know what the solution is
11 going to be.

12 I admire the spirit of that man who brought up
13 that schooner from the bottom of the Great Lakes. I
14 can sympathize with his great distress. I have heard
15 lately that he wanted to sink it again because there
16 was no mechanism to carry the ship once he had it up.
17 He was up against the deterioration of a wooden vessel,
18 pretty difficult stuff.

19 In my case, as people may have noticed, the
20 vessels I have saved, at least locally, I've nudged
21 them up to government, with the help of many other fine
22 people in the museum organization over the years. I
23 think -- I can almost state it as a maxim -- that if
24 you have a sizable wooden ship, the only hope is
25 government. It's the only source of adequate funds.

1 The Wawona is a good example. Peter mentioned her,
2 talked about her disintegration up in Seattle. There
3 is a ship that was in our trade here that has a superb
4 West Coast history and is a beautiful thing, somewhat
5 larger than the Thayer, generally a sister, and she is
6 just going down, down, down.

7 In contrast, the Thayer, which is under
8 government, is more or less prospering. She has a long
9 way to go, but it's an upward-looking situation for the
10 Thayer, and it's certainly a gloomy path ahead of the
11 Wawona. I don't think, provided the vessels are
12 interpreted -- I stress that -- I don't think that that
13 is a bad diversion of the taxpayers' money. I think if
14 you fix them up and you tell their story and people go
15 on board, you're giving value for the taxpayer dollars
16 that are expended. That is hardly the case, though, if
17 the vessel is a cold and uninterpreted ship.

18 There is another aspect of this old ship
19 business that has always interested me, and it has to
20 do with the difficulty of attracting money for them.
21 That is because if a family, say, wants to honor their
22 grandfather and they're approached by somebody who is
23 going to create a library ashore -- one group wants to
24 do that -- or another group wants them to save a
25 fishing schooner down in the harbor, almost every time

1 the heirs are going to go with the library, because the
2 grandfather's name will be carved into the granite
3 cornerstone and they know that it will be there,
4 regardless of what happens, for a century or more. But
5 if they back an old ship, they come to something else,
6 and that is, they know instinctively and with good
7 sense that the vessel has to have something called
8 management, good management, down the decades or it's
9 not going to survive. So they're putting the family
10 endowment into something that may or may not work. If
11 the management wobbles, as it does at times, or
12 vanishes altogether, well, the memorial to grandfather
13 is doomed. That is one of the things that makes this
14 old ship business especially difficult.

15 As Peter mentioned, the management at Mystic,
16 that commendable institution, wobbled some decades ago,
17 and the ships were in jeopardy there. Fortunately,
18 it's come back and is model for all of us at the
19 present time.

20 Then there is another large, overriding aspect
21 of this whole thing, and that is steel ships and wooden
22 ships. The differences are enormous. The problems
23 with wooden ships are so vast that I think, as I say,
24 that only government can sustain them if they have any
25 size. There are exceptions, as there are to all

1 things. The Mystic experience with the Charles W.
2 Morgan is one of those exceptions. But generally
3 speaking, I am obliged to speak generally, the only
4 hope, I think, for the vessels is that kind of support.
5 Steel ships are a different matter, the coatings, the
6 present day coatings inside and out, are such that
7 their lives can be vastly extended. The bottom coating
8 on the Balclutha, when they took her out after six
9 years, was as slick as a porcelain bathtub. That was a
10 Navy hot plastic applied in 1960. We saw it again in
11 1966. Interiorly, we used urethane fluid film, a
12 marvelous -- it's like red cold cream, but it creeps.
13 It's a lanolin-based material that creeps into the
14 cracks and kills rust. It's kind of miserable to be
15 with, but you put it in the lower part of the hold, and
16 it's like having two or three extra members of the crew
17 permanently working down there. But there is nothing
18 like that for the wooden vessels. The steel ships do
19 have one almost universally weak area, which is the
20 decks. Decks are a problem. That gets us back to
21 wood.

22 I am getting a signal from Mr. McGrath that I
23 should conclude. I will do that. I want to conclude
24 with a word of hope. If you can restrain dry rot, and
25 that is the big killer of wooden ships, as you all

1 know, and to some degree keep out marine borers, which
2 is considerably easier, there is one side of it that is
3 worth thinking about, and that is that the older the
4 ship gets, the more valuable it gets. That is opposite
5 to many other aspects of the human experience. So, if
6 the ship can survive and if you can, in particular,
7 keep dry rot away, it may be that she has gone
8 downhill, like the Wawona, to a very low ebb and she is
9 just about gone, but if she pulls out of that, she is
10 more valuable because she has lived another ten years.
11 In this country, there is a feeling for nostalgia,
12 particularly maritime nostalgia, that has sprung up in
13 the last 15 years, that I find utterly astonishing. It
14 is a very sharp upward curve.

15 Two final notes. On the subject of keeping
16 out dry rot, I have been proposing to people here
17 something called the "Kortum Kanopy," and "canopy" is
18 spelled with a "k." That is a device, an awning, using
19 modern materials, on a pipe frame that is designed
20 to -- and it is just an idea taken from the old Navy,
21 which used to build a wooden house on their ships to
22 keep the weather out. This is a pipe frame that
23 unbolts and disassembles, and you take it down during
24 the months of the year when you want the public on
25 board and you want to show your ship, and rest of the

1 year, you bolt it together and, in the winter months,
2 cover it with a modern fabric.

3 The sides extend beyond the side of the ship
4 some five or six feet so the the rain spills over the
5 side, doesn't come aboard. There is a gap between the
6 canopy and the bulwark of the ship so that air
7 circulates. We built a miniature of this for the main
8 hatch of the Balclutha, and it works very well. I
9 don't see why it couldn't be developed to a very
10 important device to resist dry rot, particularly in the
11 wooden ships.

12 Finally, the thought I'd like to leave with
13 you is that I think we ought to develop a national
14 skills force for these vessels. I proposed some years
15 ago that the charge of maintaining our ships here ought
16 to be turned over to the Mystic repair department. And
17 I still think that kind of thing is a good idea. How
18 can you keep good, young people in the business unless
19 they have some chance to rise, unless the workforce is
20 that large that there is room for promotion, that they
21 sense stability. The tasks across the nation are so
22 similar that these people can be interchangeable. They
23 can work with Mystic. When winter comes on, they can
24 come out here. I think there is much to be said for
25 making it nationwide instead of having just little

1 clusters here and there. This is basically for the
2 good of the young people that we are trying to attract.
3 Why should they live on these minimum wages and living
4 kind of the hippy life when something much larger can
5 be contrived, where they can rise and become foremen
6 and count on a career and get married and do all the
7 things that young people want to do.

8 [Applause]

9 MODERATOR McGRATH: Thank you, Karl. We have
10 coffee back here. We have ten minutes for the coffee.
11 I would like to start promptly at 10:00 o'clock.
12 Thank you.

13 [Brief recess]

14 MODERATOR McGRATH: I'd like to introduce our
15 first speaker in Session 1, Planning for Work on Museum
16 Ships. That is James Delgado. Jim is a personal
17 friend of mine, has put a tremendous amount of work in
18 this course. He's a historian, soon to get his masters
19 degree in maritime archeology. He is a fellow diver,
20 along with me. I think we will all be interested in
21 what Jim has to say. Jim.

22 MR. JAMES DELGADO: Thank you. It's an honor
23 to be here today, and I am glad to see so many folks
24 have joined us. I'd like to address the National
25 Register of Historic Places and its role in maritime

1 preservation. What I am about to say is based on my
2 experience as a National Park Service historian with a
3 maritime specialty. In my Park Service career, albeit
4 brief, I have prepared 21 National Register nominations
5 and five National Historic Landmark studies. Some 14
6 of those were maritime-related, and eight of them were
7 specifically for vessels. So, what I say is based on
8 that experience and does not necessarily reflect the
9 views of the National Park Service or the Department of
10 the Interior.

11 [Laughter]

12 MR. DELGADO: I have been around long enough
13 to play it safe. The National Register of Historic
14 Places can and should be an important tool for maritime
15 preservation. It is, unfortunately, underutilized.
16 The National Register nomination process can be an
17 important step in the assessment of a vessel's
18 significance and integrity, utilizing a uniform
19 criteria, and it can be an important part of the
20 planning process for the preservation of historic
21 vessels.

22 The National Register can also be used to
23 define categories and priorities for significance of
24 historic vessels in the United States.

25 Finally, it provides an incentive for maritime

1 preservation through the aiding of funding for maritime
2 preservation projects.

3 Well, what is the National Register? It's the
4 official list and inventory of the nation's cultural
5 resources worthy of preservation. It was authorized by
6 Congress with the the National Historic Preservation
7 Act of 1966 and is administered by the National Park
8 Service for the Secretary of the Interior.

9 The National Register now includes
10 approximately 40,000 sites, structures, buildings,
11 districts, and objects significant to American
12 architecture, archeology, engineering, and culture.
13 The National Register includes historic National Park
14 Service areas, national historic landmarks designated
15 by the Secretary of the Interior, and significant
16 properties nominated by federal and state agencies and
17 by others which are evaluated and approved by the
18 National Park Service.

19 National Register properties are evaluated
20 according to a uniform set of standards. This
21 distinguishes them. They're objectively, uniformly,
22 and professionally evaluated. The benefits of National
23 Register status include recognition of that property's
24 significance to the nation, state, or community,
25 federal or federally-assisted project planning

1 consideration, eligibility for tax benefits for
2 buildings, and qualification for federal assistance in
3 historic preservation when funds are available.

4 The National Park Service works with state
5 historic preservation officers to establish national
6 standards for historic preservation to identify and
7 document significant cultural resources in the United
8 States and to assist in preservation efforts as well as
9 to educate the public concerning the value of historic
10 preservation. The National Register is an important
11 tool in this regard.

12 The National Park Service also administers the
13 National Historic Landmark program, which is, in a
14 sense, an assessment of the creme de la creme -- that
15 is, assessing those nationally significant properties
16 on the National Register through thematic or special
17 studies.

18 How is a National Register property assessed?
19 Well, it has to have a context, first off. It must
20 possess significance in American history and be
21 representative of significant themes or patterns in
22 history, historic architecture, archeology,
23 engineering, or culture. It has to relate to a
24 specific geographical area, either the local area --
25 that is, a community, town, county -- a state area,

1 which would include territories, the District of
2 Columbia, Pacific Trust territories and the like -- or
3 national areas, nationally significant sites.

4 It must possess integrity of location, design,
5 setting, materials, workmanship, feeling, and
6 association. And it must at least meet one of four
7 criteria. Criterion A is an association with events
8 which have made a significant contribution to broad
9 patterns of history. Criterion B is that it is
10 associated with the lives of persons significant in the
11 past. Criterion C, that it would embody distinctive
12 characteristics of type, period, method of
13 construction, representative work of a master, possess
14 high artistic values, or represent a significant entity
15 whose components lack individual distinction. Or
16 Criterion D, have yielded, will yield, or may likely
17 yield information important to history or prehistory.

18 Generally, properties 50 years or less in age
19 are not eligible unless they are of exceptional
20 significance.

21 Obviously, Criteria A through D can be applied
22 to vessels. How has this been done? Well, basically
23 the status of National Register nominations in the
24 United States for vessels indicates that it is an
25 underutilized tool. As of 1976, the tenth year of the

1 National Register program, only 46 vessels, eight
2 shipwrecks, four of which were raised and on land, were
3 listed on the National Register. As of 1984, in a
4 sample of 23,000 of 40,000 National Register
5 properties, we came up with a list of 135 vessels on
6 the Register. That includes 33 archeological sites, or
7 archeologically recovered vessels. These vessels
8 include Alvin Clark from the Great Lakes, our own
9 Balclutha, the schooner Bowdoin, the Charles W. Morgan,
10 the Delta Queen, a Francis lifeboat, the yacht
11 Helianthus III, the lightship Huron, the SS Indiana at
12 the Smithsonian, the gondola Philadelphia, the nuclear
13 ships Savannah, Ticonderoga, the Japanese fleet at Truk
14 Lagoon, USS Constitution, and USS Nautilus.

15 These are just a few. We have prepared a
16 listing of all those properties that we were able to
17 find in this sample, and you'll be able to pick up a
18 copy at the table a little later.

19 In terms of national historic handmarks, there
20 are a few national historic landmark vessels. Let me
21 comment on three particularly. A World War II theme
22 study has been completed which includes a number of
23 vessels significant to the Second World War. These
24 include the liberty ship Jeremiah O'Brien, berthed here
25 at Fort Mason, USS Massachusetts, USS North Carolina,

1 and USS Arizona at Pearl Harbor.

2 Our own ships here at the National Maritime
3 Museum have also been assessed according to National
4 Historic Landmark criteria. Our nationally significant
5 vessels include C.A. Thayer, the ferryboat Eureka, the
6 steam schooner Wapama, the British merchant vessel
7 Balclutha, and a National Historic Landmark study for
8 Hercules, our tugboat, is now pending.

9 National Historic Landmark properties also may
10 include archeologic sites. We are currently preparing
11 a thematic group nomination for the National Historic
12 Landmark program of nine California Gold Rush shipwreck
13 sites on this coast.

14 It's unfortunate that so few of the many
15 historic vessels in the United States have been
16 nominated. This is particularly unfortunate, since
17 Congress, facing a number of requests for the
18 preservation of vessels, has asked for a prioritized
19 significance assessment of the known world of historic
20 vessels in the United States. The National Park
21 Service, working with the National Trust, is doing this
22 under the leadership of Chief Historian Edwin C. Bearss
23 in in Washington, D.C. The tool being used is the
24 National Register and National Register criteria.
25 Those vessels already on the National Register will

1 receive first crack.

2 So, National Register nominations are a must
3 if we are going to go with this, but they have to be
4 done well and they must adequately document how the
5 vessel meets the national register criteria of
6 integrity and criteria A through D.

7 But before all this, a few considerations.
8 The National Register has yet to develop a specific
9 criteria to assess the unique character of maritime
10 resources. The National register now evaluates vessels
11 on a case-by-case basis.

12 I'd like to suggest some ideas for
13 vessel-specific criteria for consideration. A few
14 questions are in order. The level of significance and
15 the quality of integrity of a vessel will affect its
16 future preservation. Its past preservation may very
17 well have affected the significance and quality of
18 integrity of the vessel. Are ships to be maintained as
19 constantly repaired and changing entities or are they
20 to be maintained frozen in time as artifacts in a
21 museum setting?

22 I would suggest two standards for assessing
23 integrity. First off, the design materials,
24 workmanship, feeling and association of a vessel can be
25 maintained if repairs, replacement, and maintenance are

1 followed with an in-kind historically significant
2 material, method of workmanship, or construction.
3 Vessels in the water ultimately become replicas of
4 restorations. National Register should remain in those
5 cases if the integrity as evidenced by hull form, rig,
6 use of materials, or craftsmanship is retained.

7 The Register currently will accept
8 reconstructed buildings when accurately executed in a
9 suitable environment and presented in a dignified
10 manner as part of a restoration master plan and where
11 no other building or structure with the same
12 association has survived. I strongly recommend that
13 this should include vessels, recognizing their
14 preservation needs in a marine environment which
15 requires constant repair and replacement.

16 If a vessel is to be preserved as an artifact,
17 this most probably means dry land, and it may also mean
18 housing inside a structure. The National Register
19 currently identifies vessels out of water in museum
20 structures as ineligible for the National Register
21 unless they're in a waterfront setting out in the open,
22 or in a drydock. These are construed as natural
23 settings for a vessel. Setting is an important and
24 integral part of integrity as the National Register
25 assesses it.

1 I would say we need to take a second look at
2 that now, particularly for vessels. Vessels in a
3 museum are not in a natural setting, says the National
4 Register, and are not eligible. This would mean The
5 Philadelphia in the Smithsonian would now not
6 technically be eligible for the National Register.
7 Ticonderoga would now not be technically eligible for
8 the National Register. And should any portion of the
9 remains of USS Monitor be raised from the bottom of the
10 Atlantic, it, too, would technically not be eligible
11 for the National Register were it placed in a museum.

12 I think what we need here is a tradeoff.
13 Preserving original materials and craftsmanship may be
14 necessary for preservation or it may be desired, as
15 would be the case with archaeologically recovered
16 vessels, particularly those which embody the work of a
17 master, style, or type. To maintain the integrity of
18 these, I think "setting" needs to be relaxed.

19 I think we need to recognize that any vessel
20 in a mint or unaltered condition -- that is, unaltered
21 by significant deterioration, restoration, or
22 replacement -- may need to be preserved as an artifact,
23 should that decision be made. As Tom McGrath will
24 discuss later, that most probably will mean dry land
25 preservation.

1 Boats generally aren't maintained in a water
2 setting per se. They can be displayed on board a
3 museum ship, but many boats are displayed in museums.
4 The National Register criteria currently discriminates
5 against boats because they can be, and in many cases
6 are, preserved inside a structure.

7 Another question is: Are vessels to be
8 construed as structures or objects? The National
9 Register currently defines them as objects. Well, if
10 they are an object, then, they're not eligible for
11 federal historic preservation tax credits. Since 1976,
12 the Internal Revenue Service has given credits for the
13 commercial use and restoration of National Register
14 structures certified by the National Park Service.
15 Under Section 48 G of the tax act, Congress has set its
16 intent to encourage the restoration and reuse of
17 historic buildings. The law works quite well.
18 Investment in historic preservation is up and it has
19 aided the economy. 150,000 of 250,000 buildings on the
20 National Register eligible for certification have been
21 certified. This created in 1984 some 70,050 jobs,
22 generated \$5.4 billion in local retail sales and
23 general business, generated \$1.6 billion in local
24 salaries at a cost of \$2.1 billion in private
25 investment and a \$320 million cost to the taxpayers.

1 I'd say that is a pretty good return. Why
2 not, then, include the benefits of tax certification to
3 vessels, particularly if they are going to be used in a
4 commercial setting or commercial use -- say, a
5 waterfront setting or historic district such as South
6 Street Seaport in New York or being actively used as an
7 operating commercial vessel like the Maine schooner
8 fleet?

9 If the law is to be maintained and kept, then
10 it needs to be amended by Congress to include vessels.
11 I believe that including vessels would be in keeping
12 with the spirit and intent of the law and would be a
13 boon to maritime preservation.

14 Let's briefly discuss multiple groups or
15 thematic groups of vessels. Oftentimes, you may not
16 wish to nominate a single vessel but, rather, might
17 wish to nominate a collection. The National Register
18 currently does not have any set criteria for thematic
19 groups or collections of vessels. How would these be
20 assessed? Are we going to look at vessels in a
21 thematic group as being individually or equally
22 significant -- that is, each of them having Register
23 qualities? Or are we going to say that they're
24 collectively significant -- that is, some of the weaker
25 candidates may be pulled in by the stronger? There are

1 many questions to be asked, and I'd hoped these
2 questions I am posing today would generate some
3 discussion later so that we can at least consider these
4 ideas.

5 There are compelling reasons to nominate
6 vessels to the National Register and to develop
7 standards for the criteria for vessels on the National
8 Register. In particular, the prioritization issue
9 behooves you to either nominate your property or to
10 reassess it if you have an old National Register form,
11 particularly if it was prepared before 1980, when the
12 standards were changed. The new standards of the
13 National Register will play an important role in the
14 assessment by the National Register and the National
15 Park Service in the prioritization effort of integrity
16 and significance.

17 If you are going to prepare your National
18 Register forms, I have a few recommendations in that
19 regard. The integrity of the vessel needs to be
20 securely documented. You need to discuss original
21 materials, workmanship, and any changes. In
22 particular, in describing a vessel, a detailed
23 discussion of the various elements should be included.
24 The National Register currently requests a detailed
25 architectural description for buildings and structures

1 nominated.

2 The International Congress of Maritime Museums
3 Historic Ship Evaluation Program assesses vessel
4 structure along with historic significance and
5 preservation considerations. The ICMM evaluation seeks
6 descriptions of primary structural material members --
7 keel, keelson, floors, stem, apron, sternpost,
8 reinforcing members, hull planking or plating,
9 fastenings, deck beams, stringers, mast partners,
10 waterways, rigging rails, caps, masts, deck furniture,
11 interior spaces, including joinery, deck machinery,
12 armament, decorations, coating and sheathings, boats
13 and tackle -- all of these need to be described and
14 assessed with comments in each case on original
15 material, deterioration, adherence to original
16 configuration, and impacts by previous restoration,
17 repair or alteration. This is a bit more than the
18 Register currently asks for. I think it behooves us to
19 provide that type of detailed description.

20 Alterations need to be discussed and assessed
21 in relation to historically significant context. If a
22 vessel was built for a specific significant context --
23 say, the grain trade, for example -- and then altered
24 for another significant context -- shall we say fishing
25 trade -- these changes would be significant and hence

1 would not affect or have an adverse integrity effect on
2 the integrity of a vessel. On the other hand, if a
3 vessel has been changed for a lighter non-significant
4 career -- let's say it was built for the grain trade
5 and was laid up and, while in the yard, was cut down
6 for some non-significant use, or just languished and
7 was stripped -- then perhaps those changes don't
8 necessarily represent some sort of significant change
9 and perhaps would have an effect on integrity.

10 But integrity doesn't always necessarily have
11 to be construed as "as built." If a vessel is
12 unaltered in its career and laid up, then, the
13 alterations may not be significant, and it would
14 represent an integrity loss.

15 These considerations need to be addressed in
16 preparing the National Register nomination
17 discrimination section. The National Register staff
18 needs to be told not only what's there, but how it
19 relates to their criteria of integrity.

20 In terms of assessing significance, it's
21 essential to link the vessel to international,
22 national, regional, or local broad historical contexts.
23 It's also important to link the vessel's participation
24 in historical events.

25 I would also state that it's important to link

1 the vessel's importance to changes in design -- that
2 is, changes in the hull or propulsion system designs,
3 discussing perhaps the evolution of vessel types.

4 Association with significant individuals
5 should also be considered covered, obviously, including
6 builders, masters, and owners. And I think an
7 assessment of the vessel's relation to similar
8 properties is needed -- that is, is it a sole survivor?
9 Is it representative of a type? Is it the best example
10 of a type? All of these need to be assessed. In a
11 sense, you, in preparing the form, should be prepared
12 to make some sort of assessment of your vessel's
13 priority.

14 Specific aspects of a vessel's relation to
15 historical events, individuals, or design should be
16 spelled out to link the vessel to key aspects of
17 National Register classifications for significance.
18 Commerce, transportation, engineering, exploration,
19 settlement, and invention, I believe, are most
20 applicable to vessels.

21 Statements of significance and historical
22 background material need to draw from primary sources
23 and scholarly secondary historical assessments and
24 should be footnoted to indicate these sources.

25 What I would recommend is thorough -- perhaps

1 not exhaustive, but thorough -- historical research,
2 then, in preparing a National Register form so that you
3 have the best available information.

4 To aid the National Register staff in their
5 assessment of significance and in description and
6 integrity, I'd also suggest that good photographs of
7 the vessel, its rig, and its significant features need
8 to be documented with individual photographs.

9 Finally, I'd recommend that instead of a site
10 map, as is the case with land-base properties, deck
11 plans, inboard profiles, lines, and even a rigging plan
12 be included, if available.

13 These features, together with a strong
14 nomination, will provide a solid base for the National
15 Register staff to assess these properties. I would
16 state that if more of these forms are prepared in this
17 fashion, perhaps it will aid the National Register in
18 the definition of vessel-specific criteria for
19 evaluation.

20 The National Register in the future can
21 continue to serve in its function for nearly 20 years
22 as a planning tool, more closely linked to maritime
23 preservation, perhaps, now. Using the National
24 Register criteria, vessels can be assessed and
25 evaluated with a uniform criteria and will be

1 prioritized. If the tax law can be amended, National
2 Register status will enhance limited funding
3 opportunities with preservation tax incentives. The
4 preparation of a good National Register nomination
5 should be an integral part of any vessel preservation
6 project.

7 We have some handouts here for you that you
8 can pick up later which include examples of what we
9 think are fair or good National Register forms,
10 including a couple of National Historic Landmark
11 studies, the current "How to Prepare National Register
12 Forms," and a list of National Register properties.

13 With that, I close and have ten minutes, Tom
14 says, for questions.

15 David.

16 MR. DAVID BRINK: I'm David Brink, White
17 Elephant. You mentioned in the context of your talk,
18 James, the subject about the National Park Service
19 already having in process a program whereby they are
20 triaging or prioritizing maritime resources. You
21 mention that it's involved with the Trust, and I know
22 now I've got the National Park Service and
23 representatives of the Trust here.

24 I'd like to hear briefly from you and those
25 represented what that program is and who is included in

1 it.

2 MR. JAMES DELGADO: Basically, Chief Historian
3 Bearss is heading up this effort. He's working with
4 the Trust's maritime office, as I understand. I guess
5 we are all familiar with the fact that there was a
6 study done by White Elephant which did list vessels.
7 Without commenting too specifically on that study or
8 reactions to it, I think that the National Park Service
9 felt in some cases that perhaps the known world wasn't
10 completely assessed. There were some notable lacunae,
11 and many of those were vessels listed on the National
12 Register. The National Park Service, realizing it had
13 a tool in the National Register and a listing, wanted
14 to input that and perhaps add to it.

15 I think none of us will argue the point that
16 the National Register is the best thing we have right
17 now for assessing significance, and we can make it
18 better. I think in that spirit, then, we are moving
19 ahead to utilize that tool and perhaps add to the
20 already fine effort done by White Elephant, working
21 with the National Trust, to generate a new and more
22 substantial listing and some sort of a prioritization.

23 As to who actually presents it to Congress, I
24 am not quite sure. Maybe Carol and Lynn would have
25 some comments in that regard.

1 MR. DAVID BRINK: I was sort of more
2 interested in who is going to be making that
3 evaluation.

4 MR. JAMES DELGADO: I would presume it's going
5 to be our National Park Service professional staff in
6 Washington, D.C., who already make National Register
7 assessments. I think if that is the case, then, it
8 particularly behooves us to make sure that we have good
9 forms and that we perhaps present some of these ideas
10 for vessel-specific criteria lest some certain
11 properties be discriminated against.

12 MR. BRINK: What I am getting at is, do we
13 have representation from the maritime preservation
14 constituency rather than just from the National Park
15 Service? That is a very critical point.

16 MR. DELGADO: At this time, I really can't
17 answer the question because I am uncertain.

18 Peter.

19 MS. GLENNIE WALL: I can help a little bit on
20 that, as I presume Peter can and several others in here
21 that were involved in the earlier deliberations on
22 that.

23 The legislature, as Peter mentioned, called
24 for several things. It called for an evaluative
25 inventory, which means we were to rank our maritime

1 resources in priority order. That is what the White
2 Elephant survey fed into that. The National Register
3 surveys are being used for that. The other, the Naval
4 surveys. There are a number of surveys that have fed
5 into that.

6 My understanding is that the final draft will
7 be put together based on those resources, using a
8 couple of people from the Smithsonian in maritime
9 history, using a couple of people -- one or more people
10 that I recommended on the East Coast that represent the
11 maritime community. Not National Park Service. Also
12 include National Park Service historians and myself,
13 representing GGNRA and the National Maritime Museum.

14 This meeting is going to be September 19th and
15 20th in Washington. I am getting two signals on what
16 the purpose is. Ed Bearss says it is to refine the
17 evaluative inventory. One of my other colleagues says
18 it's to explain to Congress what we need to do in
19 evaluative inventory.

20 So, it's moving along, and there has been a
21 lot of good work done, including that of White
22 Elephant.

23 MR. JAMES DELGADO: Basically, what we're
24 saying here is that this won't be the final word, then.
25 But the Park Service is going to assess the known

1 world, at least as represented by the register and
2 register-eligible properties, and then, as Glennie
3 says, it will feed in. I was a little unclear on that
4 myself.

5 MR. PETER NEILL: I think this points up right
6 at the beginning one of the great flaws we face -- that
7 is, in the register process itself, it requires the
8 initiative of the nominator to push forward, so
9 therefore you have a number of resources that are
10 nominated out of enthusiasm and you have others that
11 are not nominated out of other obligations or whatever
12 it is. It's a very haphazard system, and it doesn't
13 reflect what is the true collection of historic
14 artifacts in the country. And I think we ought to say
15 that.

16 MR. JAMES DELGADO: I agree with you, that it
17 is not a thorough reflection of the true world. I
18 think that it can be made to be, and I think that is
19 what we need to address.

20 We, as the maritime preservation community,
21 need to recognize the need for the register and to make
22 it work to our advantage and to nominate these
23 properties and to do a good job of it.

24 So, that is one of the reasons I am up here,
25 is to -- if you haven't done it, to spur you on. If

1 you have done it, take a second look. And we sharply
2 need, as a professional maritime community, to
3 encourage the nomination of vessels, particularly with
4 this new effort, but also because I think it's a very
5 good planning tool. Peter is absolutely right. We
6 need to forge ahead.

7 MR. PETER NEILL: The second point is the
8 process itself. Glennie describes two alternatives. I
9 hope it's the latter alternative. Because for the
10 National Park Service to essentially institutionalize
11 its priorities off of the register -- if you want to
12 talk about notable lacunae, you are going to have more
13 notable lacunae failing to take advantage of the
14 National Trust survey and all the other things than if
15 you do not. So, that is Point 1.

16 And Point 2, the fact is that if the Park
17 Service wants to take true leadership in this, it
18 should not be narrow and parochial. And the fact is
19 that -- I don't know the composition of the group --
20 but the composition of the evaluating group, if you ask
21 me what I know of it, really doesn't reflect the
22 maritime community at all. In fact, there is no
23 National Trust representative. So, therefore, it seems
24 to me that you're not really living up to the spirit,
25 if not the letter, of the instruction. And therefore,

1 I think we are kidding ourselves.

2 So, I would hope that the message could go
3 back that the maritime community, at least as expressed
4 here, feels that there is a danger inherent in the Park
5 Service closing its ranks, throwing up its bureaucratic
6 walls and feeling paranoid about this. The whole point
7 is that it won't work unless it's a broad-based
8 movement. And to start the process the way it seems to
9 be going, I think it's an error.

10 MR. JAMES DELGADO: Lynn was first, Walter.

11 MS. LYNN HICKERSON: Let me just follow that
12 by saying, in fact, being the only person at the
13 National Trust, in addition to Carol at the moment, I
14 hadn't even heard of this part as yet until now. And
15 for want a better way of communicating, there are two
16 lists which I would like to just throw into the pot,
17 which I don't think you all have been thinking about.
18 One is an inventory that was started by Mr. Baker, Bill
19 Baker, for the National Trust, years ago. It's in our
20 file. I think people would find it very interesting,
21 if not useful. And the other is Norman Brouwer's
22 expansion of that list, which is in press, I
23 understand, in Britain, at the moment. That should at
24 least expand the list.

25 You said sampling of the National Register.

1 How do you do that?

2 MR. JAMES DELGADO: Well, it was a euphemism.
3 Basically, we've got 23,000 properties which are
4 currently computer-listed and retrievable, of the
5 40,000. I asked the Register staff to run them all and
6 break out all vessels. And then taking what they broke
7 out and --

8 MS. LYNN HICKERSON: I didn't know that was
9 possible.

10 MR. JAMES DELGADO: It's now possible, and
11 they are still working on it. But taking that and
12 doing a little homework of our own and catching a few
13 that they had missed that we knew of specifically, and
14 then also taking a look at the separate listing that
15 they had broken out for shipwrecks, we were able to
16 develop this list of 135. It does not represent the
17 known world by the National Register, but it is at
18 least a sampling, in a sense, of at least half of the
19 properties that are there.

20 The other point I want to make is that a lot
21 of what I said is based on discussions with some of our
22 people in the Maritime Task Force, with our chief
23 historian and with some of the National Register staff.
24 Again, it does not reflect the policy of the department
25 or the service.

1 I think nothing is cast in concrete
2 absolutely yet. I think that maybe it might be more
3 proper or appropriate to say that this is the direction
4 we want to go in, and at least this is the direction we
5 are going to go in in providing our listing for this
6 prioritization -- that is, using National Register
7 criteria.

8 I think we would be foolish, and I am
9 positive, knowing at least the professionalism of our
10 chief historian, to neglect the other resources that
11 are available. I know that Ed is aware of Norman's
12 fine studies as well as the Trust's list. And I think
13 we will be taking a look at all of those and perhaps
14 looking at the properties and assessing them in terms
15 of National Register criteria.

16 I would hope, Peter, that we wouldn't strive
17 to be parochial or throw up our bureaucratic walls, and
18 I think that is one very good reason why we are here as
19 the National Park Service in hosting this, is to
20 facilitate dialogue and discussion and to move ahead.
21 Because we have to unite on this as the maritime
22 preservation community and not view ourselves, in a
23 sense, as separate entities.

24 Karl proposed that perhaps we all need to get
25 together in sort of a national way. Perhaps not

1 administratively, but at least philosophically and
2 cooperatively. I'd hope that the comments that are
3 generated from this as well as the other sessions will
4 have some effect and influence on what is done in
5 Washington. I know they are going on.

6 MODERATOR McGRATH: Thank you very much. We
7 are going to have some more discussion. I know Walter
8 has a pressing question, but we do have to move on.

9 Our next speaker is the historian at the South
10 Street Seaport Museum. His name is Norman Brouwer.
11 I'd like to welcome him today.

12 I'd also like to make the note, please, when
13 you ask a question, identify yourself. The microphones
14 are right here. We are trying to get these comments
15 and put them down. This microphone. Please face the
16 microphone. Everybody is concerned about your
17 comments. We have two ways we are recording this. So
18 you have to help us by identifying yourself and then
19 asking your questions. Thank you.

20 Norman. And thank you, Jim.

21 [Applause].

22 MR. NORMAN BROUWER: I am going to be speaking
23 on documentation of historic vessels and the
24 possibilities of setting up standards for
25 documentation.

1 I would first like to define documentation as
2 the assembling of information on an artifact in order
3 to provide a permanent record and a useful resource.
4 Documentation pretty well divides into two major areas.
5 One would be recording, which deals with the
6 information that is embodied in the artifact itself,
7 and the other side, research, which draws upon
8 information about the artifact available from other
9 sources.

10 There has been a great deal of recording done
11 of cultural resources that were in imminent danger. It
12 may seem less compelling that we need to record museum
13 vessels. We have, after all, saved these ships. And
14 if we are successful, they will be around indefinitely.
15 Well, there are some very good reasons. And at first I
16 would like to suggest a change in attitude towards
17 ships at the moment they're acquired. These ships are,
18 in fact, raw archaeological evidence. There is a great
19 temptation to rush in and begin doing some work on
20 them, taking away the things that we feel aren't the
21 most historic and adding things that are missing from
22 earlier periods.

23 What we're doing, in effect, is compromising
24 the evidence. We are destroying information. You
25 really should establish an attitude toward the artifact

1 similar to the attitude of a painting conservator
2 toward the restoration of a fine work of art. The
3 conservator records the painting as it is at the moment
4 they take it on. And from the moment they begin
5 working on it, they log everything that they do to it.

6 That would be the ultimate situation with
7 historic ships. You record exactly what exists at the
8 moment you acquire that ship, all the evidence that it
9 contains of the history it has gone through, and from
10 that moment forward, you record everything you do to
11 it. We have extreme cases where that did not happen.
12 The USS Constitution, one of the worst, of course, and
13 no fault of the people currently involved with the
14 ship -- the rebuildings took place long before they
15 were born -- but these rebuildings were very poorly
16 documented or the documentation has been lost, and you
17 have a tremendous puzzle going back and deciding what
18 feature of that ship was added at what point. Did
19 these rebuildings in fact replace in identical fashion
20 what was there before, or did the people, because of
21 the time they were working, make subtle changes or even
22 substantial changes in the ship? So we don't want to
23 leave that legacy to future generations on ships we are
24 working on, and that is the biggest argument for
25 documentation that I can see.

1 Now, there are many more arguments. We just
2 heard about the National Register and that
3 documentation is very valuable in nominating a vessel
4 for the National Register.

5 The documentation is also going to be valuable
6 in interpretation eventually, and one type of
7 interpretation I am very much in favor of is the
8 publishing by museums of a monograph on each vessel.
9 This is a book which covers at least three areas in
10 great detail: the history of the vessel, the
11 restoration that has taken place, and the ship as an
12 example of technology. This would be a very detailed
13 description of the ship, its design, construction,
14 living quarters, decoration, all the areas that we can
15 document about it.

16 I would like to go into some of the resources
17 that we have as far as standards for documentation, and
18 I will begin with the first slide. The first real
19 attempt to document historic vessels in the United
20 States on a large scale was the Historic American
21 Merchant Marine Survey. This was established in the
22 late 1930's. It was a Depression relief project. It
23 put naval architects, draftsman, and historians to work
24 in teams sent out throughout the country to record
25 endangered vessels. These were generally hulks lying

1 on beaches, ships that were obviously not going to last
2 much longer.

3 As it happened, they were only able to work
4 for 18 months before funds were cut off. In that time,
5 they recorded over 400 ships. Of those 400 ships,
6 ironically, one is still in existence. That ship is
7 now in Norway. They recorded the Gjoa, the first ship
8 to pass through the Northwest Passage, 1909, which was
9 then lying in Golden Gate Park here in San Francisco.
10 The ship has since been returned to Norway and is now
11 displayed in Oslo.

12 So, all the American ships covered by the
13 survey are gone, and what we have left is the
14 information collected by these people in their 18
15 months. This is the original catalog of that survey.
16 It gives some idea of the type of information
17 collected. Of course, the traditional forms of
18 documentation, the results of documentation are
19 measured drawings, photographs, and written
20 descriptions. It is certainly not inconceivable today
21 that the results of documentation might also appear on
22 video or sound tape or on computer disk.

23 There are many features of ships that can be
24 documented, and a great deal of emphasis at that time
25 was given to the hull form. Collection of hull lines.

1 This tends to dominate the material in this survey.

2 Some recording was done of hull structure, a
3 certain amount of interior layout, deck layout, rig.
4 Sailing vessels were much more documented than steam or
5 power vessels. Today we think in terms of many more
6 aspects of documentation to be done, going on into the
7 life of the people on board, the social context of the
8 vessel. Not much in the way of oral history was done
9 at this time. Today that would be a very important
10 factor, having a record of the people who are familiar
11 with the ship.

12 The survey has been published. In its
13 complete form it costs \$3,000. It is stored in the
14 Smithsonian as part of the national watercraft
15 collection. Throughout this period, since the
16 information was collected, individual drawings had been
17 available and are still available for a reasonable fee.
18 This is also true of the many photographs that were
19 taken.

20 Also founded in the 1930's was the Historic
21 American Building Survey. This survey has remained
22 active. The level of activity has varied through the
23 years. Today it's quite active. By around 1980, they
24 had surveyed over 15,000 buildings. They're not just
25 concerned with recording endangered artifacts, they

1 were, in effect, compiling an archive on the history of
2 building in the United States, and they have done a
3 very fine job of it.

4 The first version of this handbook was
5 published in 1934. It's been revised and expanded
6 since then. It's divided into five chapters. The
7 first chapter has to do with organizing a survey. The
8 second chapter, preparation of measured drawings. The
9 third, photography. The fourth, historic research.
10 And the fifth, special situations -- landscape
11 recording or recording of historic districts, groups of
12 buildings.

13 Since we are concerned with research, the
14 section on historic research is more involved in how
15 you present the information collected than how you
16 collect it. The other sections do go into methodology.
17 The section on measured drawings has useful information
18 on going out and recording artifacts, and the
19 photographic section does as well. The section on
20 historic research simply makes the statement as far as
21 researching things, people are assumed to know how to
22 do this. That's more or less a direct quote: People
23 are assumed to know how to do this.

24 I think the problem is that from one type of
25 building to another -- and this is even truer of

1 ships -- the sources are going to vary so greatly, it's
2 difficult to put them down in standards, the
3 recommended sources to search for your information.

4 Now, there are standards for historic
5 research, and research methods are taught. There are
6 books on the subject, particularly dealing with
7 critical assessment of your sources, of your
8 information, when you can treat information as fact,
9 when you're justified in calling a piece of information
10 a fact, when you are justified in calling it
11 "probability" and when only "possibility."

12 This is an example of a field sketch from the
13 handbook. The message they're getting across is
14 clarity, doing sketches that are easily readable both
15 by yourself sometime in the future when you went to do
16 a final drawing from them or by someone else if someone
17 else ends up being the final draftsman for this
18 project. This is an example of a HABS final drawing.

19 Another resource is the Handbook of Historic
20 American Engineering Record, a very detailed handbook.
21 The HABS handbook at one point says it's not intended
22 to simply lay down instructions. Well, the HAER
23 handbook does lay down instructions, and quite detailed
24 ones. They're very concerned with the quality of the
25 finished product that is going to be turned over to

1 them for permanent storage. They lay down the details
2 of the finished drawings, smallest detail.

3 It starts to become apparent that a certain
4 level of skill is required to do this type of recording
5 work, also a certain expense and equipment. The
6 photographic requirements for archival materials
7 require minimum size four-by-five negatives. Not
8 everybody is going to run out and buy a four-by-five
9 camera.

10 This worries me a little. Now, much as I
11 believe in standards, I hope we don't institutionalize
12 something to the extent that only professional
13 draftsmen or professional photographers are still able
14 to do the work. I'd like to see standards that still
15 leave opportunities for the conscientious amateur as
16 well and for the people directly involved with the
17 ships.

18 Now, the third, or fourth, actually, resource
19 is as yet not formally published, but the Maritime Task
20 Force of the National Trust prepared preliminary
21 standards for documentation edited by Maynard Bray.
22 Now, they are fairly thick volumes, and, even then,
23 they don't cover all the areas of documentation. It's
24 apparent, if this is just part of documentation, and
25 documentation is part of standards for dealing with

1 historic vessels, that the finished product carried out
2 would be a pretty good size encyclopedia. So, there
3 has to be some boiling down of this material. But the
4 initial volume, which I believe, though it was only a
5 limited run, there may be some ways to obtain through
6 Xerox, has very good information on special problems of
7 ships. They picked problems unique to ships, and, of
8 course, the first was recording the hull form, taking
9 lines off vessels or small craft, excellent information
10 on that. Also information on oral history, recording
11 of maritime traditions and maritime skills.

12 Now, the Historic American Merchant Marine
13 Survey was never revived, but there is a plan underway
14 to revive it in the near future, and there are some
15 moves being made. The National Trust is involved in
16 that and would be better able to explain what is being
17 done. If the Historic American Merchant Marine Survey
18 does reappear, they would seem to be the appropriate
19 body to set up the standards for documentation, just as
20 HABS and HAER have set up theirs.

21 I'd like to make one general statement on
22 standards. Standards are not something that maritime
23 museums should be waiting for somebody else to draw up.
24 Each museum should really have on paper agreed-upon
25 guidelines or principles or standards for the way it

1 intends to deal with its historic vessels. It's a
2 parallel situation, the standards for museum ethics.
3 The American Association of Museums has now published a
4 booklet on museum ethics, ethical conduct for museum
5 staff and trustees and volunteers. This gives each
6 museum the option of going on record as endorsing the
7 ethical standards of the American Association of
8 Museums. Prior to this, museums had the responsibility
9 of stating their own guidelines for museum ethics.
10 Well, the point is, we should be doing one or the
11 other. If the standards for dealing with ships don't
12 exist, then we should each be drawing up our own. This
13 will, among other things, ensure uniformity of the
14 quality of the work that we do throughout our ships.
15 It will also eliminate a lot of rehashing of the same
16 philosophical questions every time another restoration
17 phase is entered into.

18 Now, HAER had not dealt with vessels until
19 just the last few months, in fact. In the absence of
20 Historic American Merchant Marine Survey, some drawings
21 that were done for the Corps of Engineers in harbor
22 cleanup work, cultural resource surveys in New York
23 Harbor had been forwarded to the Historic American
24 Engineering Record. This is their first involvement
25 with ships. They had never shown any great interest in

1 getting involved in this field. But in the absence of
2 a merchant marine survey, the Corps of Engineers had
3 little other choice. The logical place to send
4 drawings was the Historic American Engineering Record.

5 This is one drawing of a New York Harbor
6 covered barge, a cross section showing structure, that
7 has gone to the American Engineering Record. But I
8 would personally be much happier to see the Historic
9 American Merchant Marine Survey revived than this
10 coming under the Engineering Record as just one area of
11 that operation.

12 Going back to various levels of recording,
13 Maynard Bray, in the work he did for the National
14 Trust, laid out three levels. The first level is very
15 marginal salvage-type recording, salvage the
16 information. The main feature of it is photography.
17 You go out and shoot a roll of film of this artifact
18 before it's lost. This just happens to be a sailing
19 ship in Burmuda, contact sheet, 35 millimeter. I have
20 done number of ships this way, and I just make up my
21 mind that I am going to shoot a roll of film, start at
22 the bow and work to the stern. I take a certain number
23 of overall views, certain number of deck views, and
24 then try to hit all the important details.

25 To accompany the photographs should be all the

1 information we know about the ship, another part of
2 this first-level recording. This is a check-off sheet
3 for one of the cultural resource surveys in New York
4 Harbor, an abandoned ferryboat.

5 Maynard Bray's second level of recording is a
6 full recording of the physical artifact -- the lines,
7 the construction, the deck layout, the fittings, the
8 interior layout, the furnishings, the rig, the
9 decoration.

10 And his third level goes beyond this into the
11 social history of the vessel -- the social, economic,
12 technological context.

13 I would like to end up by sharing a few
14 research experiences with you having to do with the
15 sailing ship Wavertree in New York, how some of the
16 research took place. One of the things you are going
17 to see is that a lot of the information comes to you
18 rather than you going out and finding it. This is a
19 great argument for publicizing your project as widely
20 as possible -- sending letters to the editor, getting
21 articles in periodicals in the areas in which
22 information on the ship is likely to exist. This has
23 been very successful with us.

24 The first thing we did was search out
25 information on the ship herself in maritime museums and

1 private collections in the areas, if there was any
2 possibility such information had ended up there. Now,
3 not everybody is going to be involved with a
4 British-built sailing ship that traded throughout the
5 world and was manned by a very international crew, at
6 least below the level of the officers.

7 We found just one really good portrait
8 photograph of the ship. In fact, copies turned up on
9 several continents. This is the picture. It was taken
10 in San Francisco Bay probably in 1896. You can see a
11 scow schooner similar to Alma on the far right in the
12 background.

13 Well, if you haven't found that many pictures
14 of your own ship, then you have to set up a scale of
15 preferences. The first preference, a picture of your
16 own vessel. The second preference, an identical sister
17 ship. This is a ship called the Fullwood, which was
18 built around the same time as the Wavertree, the same
19 dimensions, same builders, and commissioned by the same
20 owners. The next scale would be a near sister ship.
21 This is Milberton. The dimensions are not similar.
22 The ship was built around the same time and built by
23 the same yard. This is an excellent photograph for
24 detail of fittings on the poop.

25 Everybody is hoping to find original plans of

1 their ship. Well, we have no original plans of the
2 Wavertree. We have this sail plan of the Milberton,
3 near sister ship. I think people have been raised in
4 the present generation to think that everything is
5 built from plans and that plans are so important,
6 nobody is ever going to throw them out. Whenever
7 somebody takes on a new ship preservation project, they
8 come along and say, "Where are the plans?" It just
9 isn't true. Many ships are built with very few plans,
10 and vast quantities of plans have been discarded over
11 the years.

12 Specifications for the construction of the
13 vessel. These can be excellent. The specifications
14 you see here are for the Bactria, another near sister
15 ship to the Wavertree. And it spells right out how the
16 ship is going to be built, the scantlings, sizes of
17 spaces, down to the fact that there is going to be
18 linoleum tile on the deck of the captain's stateroom.
19 It also lists all the equipment the ship would have,
20 down to the number of teaspoons, decanters, all the
21 supplies for the sailmaker, the carpenter, and so
22 forth.

23 And inspection by Lloyds, the form that they
24 used, filled out with all this detail on the ship.
25 This also contains information that can be useful in

1 restoring her. The tonnage measurement for the
2 deckhouse; it confused us at first. Eventually it did
3 indicate the size the missing deckhouse should be.

4 This was a photograph that turned up through a
5 Christmas card. A painting by John Stobart of the ship
6 had been distributed to gift shops in the British
7 Isles. An elderly doctor in a small town near
8 Canterbury walked into the local gift shop and saw this
9 and said, "That looks like our old Wavertree." He had
10 been a small boy, one of the two in this picture, 1907,
11 the last time he saw the ship. He had no idea she
12 still existed. On the back of the Christmas card was a
13 small caption stating that she was being restored in
14 New York. So he sent off a letter.

15 This was taken in the saloon of Wavertree. It
16 tells us almost nothing about the saloon itself, but it
17 shows us, on the right, the type of piano his father
18 had, and on the left there are a couple small
19 indications of a stove, just coming into the left side
20 of the picture.

21 Next. This came from another member of the
22 same family, the other small boy in the earlier
23 photograph. This tells us something about the grading
24 on the side of the wheel box and the way the ship's
25 name was displayed, both of which are now missing.

1 Next. In the Falkland Islands, we found a
2 series of photographs of the ship dismantled in 1910,
3 priceless information on the deck layout. Some
4 interesting problems sorting out that mess and deciding
5 what features are tangled up in there.

6 Next. Also one of the best views we have of
7 her figurehead.

8 Next. Punta Arenas, Chile. She spent many
9 years there. We enlisted the manager of the local
10 newspaper to try to find information on her. It
11 eventually turned up a man who had, in 1929, belonged
12 to a rowing club, rowed out to the ship and took some
13 snapshots. Some of these have valuable information for
14 us, features that are now missing.

15 Next. The ship's bell turned up in museum in
16 Sweden. The ship was originally completed as the
17 Southgate, 1886.

18 Next. One of the two sons of Captain Masson
19 had the original coffee pot in England.

20 Next. Was using one of the fire buckets as a
21 wastebasket.

22 Next. Which is the model for the restored
23 fire buckets.

24 Next. This model turned up in Belfast,
25 Ireland in a ship chandlery. Somebody wrote to us one

1 day, had heard that we had the Wavertree, must be
2 interested in the fact that they had a model of the
3 ship. So, I went over and photographed it.

4 One question is: How much can you learn from
5 the deck detail on a model like this next?

6 Next. Apparently, it's not too reliable. We
7 are fairly certain she never had ladders to the poop
8 that ran fore and aft. And the mizzenmast is in
9 entirely the wrong location relative to the forward end
10 of the poop.

11 Next. This dismasting photograph is the only
12 clear view we have of the deckhouse taken on board.
13 You see the deckhouse in the distance, 40 feet long, 17
14 feet wide. It was taken off sometime in South America
15 when she became a barge.

16 Next. This is the deckhouse restored in the
17 last year.

18 Next. You have to do a lot of archaeological
19 work in the ship herself to find the locations of
20 missing features. We are fortunate that when they
21 constructed the deck beams, they left the flange off
22 one side when it coincided with either the forward or
23 the after end of the hatch. That was great. That gave
24 us the extent of the hatches. We searched around for
25 some time, eventually found the pattern of rivet holes.

1 There are a lot of rivet holes in the plates and beams
2 of these ships. We finally detected the pattern that
3 told us where these diagonal tie plates plates had
4 been.

5 Next. This is another near sister ship, the
6 Cressington, excellent photograph for the details of
7 the brass fittings at the top of the poop ladders and
8 the gangway that run to the standard compass platform.

9 Next. This is a restoration based largely on
10 that photograph. There was a feature of that
11 photograph that could have been confusing. Over the
12 shoulder of one of the people, you could see the corner
13 of the builder's plate.

14 Next. Fortunately, we had other views that
15 showed the builder's plate. If we had had just the one
16 photograph, we might have assumed Oswald Mordaunt &
17 Company put their builder's plates on the mizzenmast.
18 In fact, in the case of the Wavertree, it was on the
19 poop bulkhead.

20 Next. This is a set of three pictures that
21 turned up in a private collection in Sweden. You can
22 see the corner of the builder's plate in the upper
23 right.

24 Next. This picture turned up in Australia.
25 It was probably taken the same day, because the two

1 people in this photograph are the two people on the far
2 left in the previous photograph.

3 Next. This is the builder's plate based on
4 that evidence.

5 Next. The big project right now is the
6 restoration of the captain's quarters. This gives some
7 idea of the elegance of a Victorian sailing ship
8 interior and the sort of restoration we are involved
9 with.

10 Next. It's not Wavertree. It's one of the
11 Hester photographs here in the National Maritime Museum
12 collection. This is what we had when we acquired the
13 ship. That is virtually the same view, standing in the
14 captain's saloon, or after cabin.

15 Next. The first thing we had to do was put a
16 new deck under it. That meant moving out all the
17 bulkheads that were in there or at least displacing
18 them. Before that could be done, we had to completely
19 record what was there. This was done with many
20 photographs, photographing every corner of every space,
21 enough photographs to form a mosaic that completely
22 covered the bulkheads of each space, and, at the same
23 time, doing complete measured drawings.

24 Now, most of this woodwork is South American.
25 It's a real hodgepodge of things -- Chilean, Argentine

1 and so forth, and very little of the original woodwork.
2 But it still had to be recorded.

3 Next. Before the deck planking came up, any
4 evidence in the planking itself -- this is either an
5 opening for a ventilator or for a deck light.

6 Next. That could be a real challenge,
7 woodwork that has been reused. Where where did it come
8 from? What was it originally? And what can we learn
9 from it? This is the way the after bulkhead of what
10 had been the officer's dining room looked like.

11 Next. This was a bit of the original
12 paneling, which was priceless. It gave us the form of
13 paneling the ship had.

14 Next. We had a few surviving lead ventilating
15 grills.

16 Next. This photograph came from Australia
17 from the family of Captain Albert Brew. He is sitting
18 in the saloon of a sailing ship. He was mate of the
19 Wavertree and later captain, and he was captain of the
20 Halewood. So, the only ships this could have been
21 taken on were Wavertree and a near sister ship,
22 fortunately. This is probably the Halewood because
23 there are small children in the photograph, and he
24 wasn't married when he was captain of the Wavertree.
25 So, the detail should be much the same, and we can see

1 in the background the same paneling that we have, and
2 we can see painted white under the table the same
3 ventilator grills. So we take this a step further.
4 This photograph gives us some more detail. Right
5 behind his head it gives us the design of the grab rail
6 fittings on the bulkhead.

7 Next. That brings us to this photograph,
8 unidentified photograph in the Hester collection here
9 in San Francisco. There the ventilator grills are.
10 There is the same grab rail fitting.

11 Next. This is going to give us further
12 details, the decoration of the top of the separations
13 between the panels, the grills above the panels. These
14 seem to have a house flag worked into them.

15 Next. This is one of the artifacts that
16 turned up, digging through the rubbish on the bottom of
17 the ship. It's the end of one of these flip-back
18 benches that were popular on Victorian ships.

19 Next. And it virtually duplicates the one in
20 this photograph. It probably tells us that the ship is
21 not Wavertree, because of minor decorative detail in
22 that bench that is missing from the one we have.

23 Next. This is the way we restored the grills
24 above the panels. We substituted the house flag of the
25 company that the ship was originally being built for

1 and was owned by for the longest period of her career.

2 Next. That is a recent photograph of the
3 saloon being restored.

4 Next. And a recent deck view.

5 [Applause]

6 MODERATOR McGRATH: Thank you very much,
7 Norman. We have one more speaker, Don Birkholz. We
8 are going to have a discussion period following Don's
9 talk, so if you hold any questions you have right now,
10 I'd like introduce our next speaker, and the final
11 speaker in our first session, Don Birkholz. He is a
12 marine surveyor with White Elephant Management Company.
13 He has been working here with us in Golden Gate
14 National Recreation Area as a consultant under contract
15 with the National Park Service.

16 Don Birkholz.

17 [Applause].

18 MR. DON BIRKHOLZ: I have been doing marine
19 survey work for the last couple of years. I got here
20 through maritime preservation, and I have actually done
21 a lot more preservation work than marine surveying
22 work.

23 I believe that to speak about surveying work
24 from the standpoint of a general surveyor probably
25 wouldn't do this group that much good. I am supposed

1 to talk about standards for marine surveying. I am not
2 real optimistic about that. First of all, standards
3 imply some agreement, some general consensus. It's
4 okay for us in the maritime preservation field to sit
5 in this room and talk about developing standards for
6 ourselves. But a marine survey is really an
7 off-the-shelf item. It's something you are going to go
8 out and get. And I don't think that imposing standards
9 on that profession is -- maybe it is not realistic.

10 The fact of the matter is, in the general
11 marine surveying field, there are no standards
12 presently, no real standards. There is no regulatory
13 body, there are no licensing boards. The result is
14 that you get a wide variation in the quality and the
15 emphasis of marine surveys. They might range from
16 everything from just a simple inventory of your ship's
17 equipment to just a statement, a conclusion, to a more
18 detailed document. But there is just no consensus
19 there.

20 So, I am going to take a slightly different
21 tack here, and what I am going to do is present some
22 ideas, some recommendations for you, whereby you might
23 go out and get a good quality marine survey for your
24 particular vessel.

25 The fact is that good surveys are performed

1 every day. I think the key to it is knowing what to
2 ask for in a survey and what to look for in a surveyor.
3 So, what is this we are talking about, a marine survey?
4 Well, you'll get a different answer from different
5 surveyors. If I was asked to say it in one sentence, I
6 believe it is the process of determining the
7 suitability of a vessel for a particular use or range
8 of uses. It won't tell you whether your vessel is good
9 or bad. That is just too clear-cut. It might tell you
10 that your vessel is seaworthy under certain conditions
11 of wind and sea when operated in a seamanlike manner.

12 The things that a surveyor has to do to arrive
13 at those conclusions are many. He has to look at the
14 design of the vessel, the method of construction, the
15 type of construction, the equipment -- condition and
16 quality and installation -- the structural condition of
17 the vessel, the ship's gear, and sometimes the people
18 that are going to be operating the vessel. A lot of
19 times, surveyors work from forms, and they only look at
20 what's on their forms. They fill in the little blanks.
21 I don't believe in that, because a lot of things have
22 bearing on the successful operation of a vessel or the
23 successful maintenance of it -- the way it's tied up,
24 who is operating it.

25 As an example, I recently did a survey of a

1 yacht. A fellow wanted to buy this yacht, and he was
2 handicapped. He wanted to go sailing, do some
3 coastwise cruising. It was a very well designed boat.
4 It was in good condition. But it didn't have the
5 proper deck access for this fellow to move about
6 conveniently. It was somewhat of a lively type vessel,
7 meaning it would pitch around in the seaway. So, my
8 recommendation included that as a factor.

9 So you have to consider all these things if
10 you're really to do a good job at informing people
11 about what they're getting or what they have in terms
12 of vessels.

13 Another thing, another facet of the marine
14 survey -- and I am speaking in general terms, what you
15 get in the market today -- is valuation. You'll
16 arrive, after looking at all this design, equipment,
17 condition, and you'll arrive at a valuation for the
18 vessel. That is usually broken down into market value,
19 which is what you can get somebody to pay for that
20 vessel, or replacement cost. And this is an important
21 factor there.

22 The scenarios a surveyor will be involved in
23 are many. He might be involved in the buyer-seller
24 situation. Insurance companies want to know whether a
25 vessel is a good insurance risk. Bank loans. Banks

1 want to know if they're going to lose their shirt,
2 whether the vessel is valued properly. Then there are
3 specialty surveys, like trip surveys. If a vessel is
4 going to go beyond its range of insurance, you have to
5 make a special survey so they can get a binder on their
6 insurance. They might insure cargoes and would want a
7 survey on a cargo, too.

8 So, in all these instances, the marine
9 surveyor often plays a part of the realist. He has to
10 take off his rose-colored glasses, he has to really
11 look hard at the situation. And often, he is the only
12 person present that is able to withdraw himself from
13 the emotion of the vessel. It seems like few inanimate
14 objects solicit more emotion than ships do. So, this
15 is a role that he has to play, and it's sometimes
16 tough. He has to detach himself from the emotions of a
17 vessel and try to be objective.

18 So, I am telling you all this as a reference
19 point from which we are going to look into historic
20 vessel surveys. And they do differ somewhat, in my
21 opinion.

22 First of all, valuation isn't that big a deal
23 with a historic vessel. Let's face it, some of these
24 vessels are actually considered liabilities. There is
25 often no market value for them. There are just a few

1 eccentric people out there that have interest in them.
2 I won't mention any names.

3 [Laughter]

4 MR. DON BIRKHOLZ: But you might want to have
5 insurance on your vessel, and in some cases you want to
6 value the equipment in terms of its historic value or
7 whatever. But I don't think valuation really plays
8 that big a part.

9 What comes in, I think, instead of that, is
10 cost of repairs, cost of rebuilding. People want
11 estimates. They want to know what it is going to cost
12 to deal with the vessel they have or the vessel they
13 are considering buying.

14 The other thing that often you run into in
15 standard surveys is viability, economic viability. A
16 fisherman wants to know if the vessel he is going to
17 buy or the vessel he is operating, if he's going to be
18 able to earn enough money with it to cover maintenance
19 costs. A fellow buying a yacht might want to know what
20 his options, whether he is going to get the most out of
21 his dollar with one vessel as opposed to another.

22 I believe with historic vessel surveys, you
23 have to substitute something for that, because a lot of
24 historic vessels are not economically viable. I don't
25 know exactly what that is that it gets replaced with --

1 it might be historic relevance, it might be educational
2 value, it might be cultural value. We will probably
3 get into that in greater detail, but I am not going to
4 address that at this time.

5 Seaworthiness is often not an issue either,
6 because a lot of vessels aren't going to sea again. It
7 might be, in a case where somebody is considering
8 converting a vessel to an operational vessel, that
9 you'll have to address the possibility of a vessel
10 being made seaworthy, but in a lot of cases, it's not
11 real important.

12 I believe, lastly, that historic vessel
13 surveys are a lot heavier on documentation and
14 restoration planning and long-term maintenance
15 considerations, too. In the general surveying field,
16 vessels might get surveys every year, so a surveyor
17 doesn't care what the vessel is going to be like in 20
18 years; he is looking to get it through the next year or
19 so.

20 So, why should you have your historic vessel
21 surveyed? Well, there are a number reasons for that.
22 One, you might be considering acquiring a historic
23 vessel and you want to know what you're getting into or
24 what not to get into. It's money well spent, I think.

25 It's a good place to start, if you own a

1 vessel, a good place to start planning for restoration
2 and for maintenance. And it also provides the data
3 base. It can provide, if done properly, the data base
4 from which to draw all kinds of conclusions about what
5 you want to do with the craft and how to go about doing
6 that.

7 When you're getting into the costs involved
8 with historic vessels, you want to run into as few
9 surprises as you possibly can. I think surveys help
10 you avoid that.

11 It may be that the marine survey is not the
12 first place you want to start with in dealing with a
13 historic vessel. You might have a vessel and it's not
14 going to be of any interest to you unless it's
15 historically significant. You might want to research
16 that first. But I do believe very strongly that the
17 marine survey comes very early in the process of
18 maritime preservation.

19 I think it's going to be useful in any case,
20 depending on what your final use of your vessel is.

21 Can we have the first slide, please. I might
22 get lost here because I can't read my notes in the
23 dark. I don't really have much to say about this ship.
24 We are going to be touring it later on. But I noticed
25 last night at the reception, a lot of you were

1 mispronouncing the name, so I want you to repeat after
2 me. This is the "Balclutha." Okay?

3 Now, as I was saying earlier, the importance
4 of a properly done marine survey, accurate and
5 detailed, is going to depend on what the end use of the
6 vessel is. The stresses imposed on a historic vessel
7 that is being actively sailed is a lot more strenuous
8 than the stresses imposed on a vessel being used this
9 way.

10 [Laughter]

11 MR. DON BIRKHOLZ: There are considerations.
12 You might run into it with a a lawnmower or something.
13 There are definitely some safety considerations, some
14 maintenance considerations.

15 Going even further, a vessel, say, a real
16 archeological vessel, a vessel from an archeological
17 dig, that you might want to preserve indoors, you might
18 not need a marine survey at all. You might want to
19 consult a preservation technologist. You might find
20 that to be much more useful.

21 So, what are the things you want to look for
22 in a surveyor? I think this is a wish list. I don't
23 think you are going to find all of these qualities in
24 anybody that is around, but it's something to look for.
25 I think that if you can approximate, the closer you get

1 to finding somebody with all these qualities, the
2 closer you get to getting what you want.

3 Just like establishing standards, vessels
4 differ so greatly that you have to speak in
5 generalities, in this case, just as you would with
6 preservation standards.

7 So, firstly, you want to try to find a
8 surveyor who is, ideally, familiar with the very type
9 of craft you're having surveyed. If you had your
10 druthers, I am sure you would pick somebody who had
11 actually built, operated, and maintained the very type
12 of craft you have. That is pretty unrealistic. Those
13 people are getting harder and harder to find.

14 So, in lieu of that, I would think that a good
15 fallback position would be to find somebody who was at
16 least familiar with the type of construction, somebody
17 who is familiar with riveted construction as opposed to
18 just straight welding, or familiar with large timber
19 construction. There are fewer and fewer survivors who
20 have ever dealt with large wooden vessels, and the
21 stresses that are imposed on them are quite different,
22 and the methods of inspection can be different, too.

23 Secondly, the surveyor should be thorough and
24 have a good inspection technique. He should be willing
25 to crawl low and climb high. If a surveyor spends a

1 day on your boat and the bilge and he comes out and his
2 coveralls are clean, jut tell him to hit the road,
3 because he hasn't done his job. You really have to be
4 very thorough and get right down in there in your work.

5 An example of that thoroughness. The C.A.
6 Thayer -- this is a condition seen on the bow strip a
7 couple years ago. A rig survey was performed on that
8 vessel. It wasn't until after that survey that it was
9 found that the bow strip was totally rotten. And when
10 the vessel was hauled out, this is what happened. So,
11 thoroughness, I want to stress, can be a safety factor,
12 too. You want to know what you got there. If he
13 inspected 99 percent of the vessel and missed this, it
14 still doesn't count. But there still could be a
15 serious situation there.

16 A surveyor should also know what to look for.
17 It's not always clear what's going on with the vessel.
18 This is a little bit overexposed. What you see here is
19 rot. It's real evident what is going on there. In
20 other cases, it's a little more subtle. This is rust
21 bleeding through fastenings, the internal sheathing of
22 the ferryboat Eureka. Obviously, there is some water
23 seepage inside there that is causing the iron
24 fastenings to rust. You are getting a rust bleed. In
25 some cases, it's not even possible to tell what is

1 going on without using some other methods.

2 The surveyor should also look at the long-term
3 effects of stresses on a vessel. In this case, it's
4 pretty obvious what is happening to this vessel. She
5 is distorted, out of the water now, but this process
6 probably started long before that. So, you want to
7 look real carefully at the structure itself and what
8 it's doing and what forces are acting on it.

9 This is the Thayer, and here you can see, if
10 you look closely, you can see that her keel is quite
11 hogged. In some cases, it's a little more subtle.
12 Here you see a little bit of dishing in the deck.
13 These are futtocks on the Eureka which are lifting
14 because of some forces acting on the bottom of the
15 hull. These are knees in the dome deck of the Eureka,
16 and there is a gap at the base of them. That is being
17 caused by the weight of the paddle boxes slowly
18 settling. With historic vessels, this is real
19 important, because we are talking about trying to
20 preserve these things for generations. And once
21 distortion creeps into your vessel, it's awful hard to
22 correct, short of rebuilding. So if you can slow this
23 process down or prevent it entirely, it's best to get
24 going on it as soon as possible. The surveyor should
25 look at all this stuff with an eye toward long-term

1 stabilization.

2 The surveyor should be familiar with modern,
3 non-destructive testing techniques. He is always faced
4 with this conflict between trying to know as much as he
5 can about the vessel without totally destroying it.
6 It's often quite difficult. In the last couple of
7 generations, there have been technological advancements
8 that have helped in this investigation. One of them is
9 the ultrasonic thickness gauge used on metals,
10 particularly iron and steel. It can allow you to gauge
11 the thickness of hull plating without having to drill
12 holes, et cetera. Boring and culturing in wooden
13 vessels, often you don't see the rot till years after
14 it's gotten into the timbers. If you can take core
15 samples out of the center of a timber and have it
16 cultured, you can identify the presence of rot funguses
17 long before they they have totally destroyed the
18 structure. Doing something about them is another
19 matter, but at least you will know they are there.

20 We use something regularly called the
21 spectrographic analysis of machinery lubricants. You
22 can take a lubricant out of an engine or a winch or
23 anything and have it analyzed by a lab, and by
24 detecting certain levels of metals, say, in an engine,
25 chromium, aluminum, phosphorous and all that stuff,

1 they can tell what parts of the engine are going bad or
2 what part of the machine are going to fail. If you do
3 everything right, it is remarkably accurate.

4 There are a couple other devices. There is a
5 device for testing the surface deterioration of wood
6 by testing its resistance to impact. There is a device
7 called the paladyne which detects the surface
8 deterioration. There is another device that detects
9 wood moisture levels. At certain moisture levels, wood
10 is relatively rot resistant. There are a few more
11 exotic things, too. On vessels with electrical
12 systems, infrared photography has come into use for
13 detecting fire hazards. You can go in a vessel, and
14 just by photographing the circuitry that might be even
15 behind wood paneling or covered up, infrared
16 photographs will detect hot spots, where there are bad
17 connections or overloads in circuits. You don't have
18 to tear into the circuitry to find this out. There is
19 eddy current meters, which are devices that measure
20 current in fittings like rigging fittings, et cetera,
21 and supposedly can detect cracks or failure points in
22 those fittings. I have never used that device.

23 In some cases, regardless of the use of these
4 devices, you're just stuck. You have to do destructive
5 testing. With a vessel that is totally sealed, how are

1 you going to know about the frames unless you get
2 inside? How are you going to know about the condition
3 of the fastenings? So, sometimes you have to do
4 destructive testing.

5 This photograph, by the way, is upside down,
6 but it still demonstrates the same thing. This is a
7 sealing plank that I removed from the Eureka during
8 that inspection. It was rotten at the time, so I could
9 just pull it out with my hands, just about, so it
10 wasn't that much destruction going on. But there would
11 be no way I could know about the condition of those
12 frames behind there if I didn't pull out some sealing.
13 So, sometimes it's just flat unavoidable.

14 When looking at structure, it's often real
15 important that the surveyor appreciate the value of
16 historic fabric. Basically, the surveyor should
17 understand the basic tenets of maritime preservation
18 and have respect for them. A lot of people believe
19 that historic fabric, if it doesn't endanger the safety
20 of the vessel or the visitors, should be retained in
21 all cases. If we had our druthers and it didn't cost
22 us any more in terms of maintenance or safety, we would
23 retain historic fabric always. Some people even
24 believe that to show heavily deteriorated material or
25 structure is actually educational because it shows the

1 long-term effects of environment on a vessel and might
2 even show the wear and tear of its original usage. I
3 think the key to this question is whether or not the
4 structure is stabilized and not continuing to
5 deteriorate. I don't believe that neglect is part of
6 our maritime heritage that we want to preserve.

7 The surveyor should maintain objectivity.
8 Wherever possible, he should be open to ideas or
9 alternatives for repairs. I believe you ought to shy
10 away from people that express real strong opinions
11 about the care and feeding of vessels -- surveyors, I
12 mean, not people in general.

13 [Laughter]

14 MR. DON BIRKHOLZ: The fact is that it's going
15 to affect their opinion. It might even affect the data
16 that they collect. The surveyor should place a high
17 priority on safety. It's an ethical question. You
18 don't want to have visitors or crew on board a
19 vessel -- you don't want to be endangering them. I
20 don't believe that any inanimate object is worth the
21 loss of life and limb. And in a realistic sense, an
22 injury on a historic craft can literally scuttle its
23 chances for success.

24 So, those are some items to look for. How you
25 actually find out whether a surveyor has those

1 qualities, I really don't know. Some of you might be
2 starting out from scratch and making phone calls. Some
3 of you might have people on staff or in your circle of
4 supporters who are marine surveyors and have dealt with
5 your particular vessel for years and can provide you
6 with the support you need.

7 But there are a few other things you can do
8 here to ensure that you get a good, quality survey.
9 One of them is to schedule the survey prior to any
10 planning or major restoration work. I am not saying
11 don't stop maintaining your vessel, but don't do
12 anything real major until you know what you got. Don't
13 cover up anything. Don't panel in or paint over
14 anything that the surveyor might need to look at. Get
15 the vessel clean. It's much cheaper to pay laborers to
16 remove gear from lockers and rust from bilges so the
17 surveyor can get a good look at it than it is to pay
18 him to do all that work himself. That might be a
19 little selfish interjection there.

20 The fact is that if you do major work and you
21 get a survey, your plans might change. You might find
22 out that what you've done is totally unnecessary or not
23 timely.

24 This is an example of some work that was done
25 on the Boeckling, on the promenade deck. These deck

1 beams, anybody that is familiar with ship construction
2 will see that, first of all, they aren't done, the
3 scarves to the rotten beam ends weren't done properly.
4 The deck is already sagging. In fact, the entire deck
5 might need to be totally rebuilt.

6 Now, for these folks, this worked out because
7 they have had the vessel open on a limited basis and
8 they were just itching to do something. This is a
9 relatively minor thing. But often, projects get far
10 into one direction before they really get the scope of
11 their goals and get focused on what they're doing. I
12 am not saying the marine survey is the whole answer
13 there, but it's part of it, and it should happen pretty
14 early in the game.

15 This is a real important point, I feel. You
16 should ask for more than just opinions from a surveyor.
17 You should get the base data and conclusions. If you
18 just get an opinion, and you happen not to agree with
19 it, you're pretty stuck. You can't go to somebody else
20 and say, "Well, Joe Schmo says this." You have to have
21 a survey redone. You have to pay somebody to come in
22 and do the inspection all over again.

23 If you get the base data -- that is, the
24 figures, the readings on hull thickness, the dimensions
25 and quantity of rotten material, just all the details,

1 at least you have a recourse for going to a consultant
2 and saying, "Look at this. This is what we've got. I
3 don't agree with the opinions of the fellow that took
4 this information." But you have the resource there.

5 What is even better than that is if you have
6 the survey or draw conclusions from the base data. And
7 by "conclusions," I don't mean opinions. For instance,
8 if you did an ultrasonic gauging of a steel hull,
9 rather than just presenting, say, a shell expansion,
10 which is a map of the hull with the little readings on
11 it, if you say that 30 percent of the hull was
12 determined to have more than the allowed 20 percent
13 deterioration, and at a rate of \$2.50 a pound for steel
14 work, it's going to cost you \$20,000 to repair your
15 hull -- if you get that information, you have whole
16 formula. You might want to introduce different numbers
17 into the formula. You might find a shipyard that can
18 do the work for \$1.75, or you might decide to class a
19 vessel with an organization that isn't as stringent.
20 You can juggle the numbers there, and you've got the
21 formula.

22 The conclusions, basically, they explain the
23 data and support the opinion. I am not saying that
24 opinions are bad, but just don't get them in lieu of
25 anything else.

1 Assist the surveyor in providing maximum
2 access. I touched on that briefly. You want to get
3 your vessel clean. But also you want to schedule
4 surveys for periods when it's out of the water during
5 haul-out. There are a lot of things that need to be
6 looked at in the bottom that you can't access from the
7 top. You need to pull sheathing, look at caulking,
8 fastenings.

9 Also, and this again is an ideal situation.
10 What you want to do is schedule surveyors -- if it is
11 not the major survey, have them come at times when they
12 have access to certain parts of the structure. Last
13 fall, I did a survey on the Conrad that was just
14 devoted to the deck structure of the vessel. They were
15 planning on renewing the teak main deck, and they
16 wanted to know what they had in the way of steel deck
17 structure left underneath.

18 Initially, I went there and did ultrasonic
19 readings from underneath, because you didn't have
20 access to the plates, couldn't measure them, top and
21 bottom, and then came back a few months later, when
22 they had ripped the deck off, and looked at the deck
23 again, and I found that the quantity and areas of plate
24 that needed to be replaced varied about 15 percent from
25 the readings I had taken earlier. It was mostly due to

1 the fact that I had gauged plates in areas where there
2 was a pit or two bits. One plate would have told me
3 that the plate overall was real thin, when actually it
4 was very local deterioration. So, there are some real
5 drawbacks to some types of non-destructive testing.
6 So, it was invaluable to be able to look at the deck
7 from this side, and I got much closer to the reality of
8 the situation.

9 If you can get a surveyor to come back when
10 you're doing repairs. You often have to have the
11 survey to know what you need to repair. But this is
12 planking going on the Thayer. This provided an
13 opportunity to see not only the beams, but fastenings
14 in the chain plates, et cetera. It would have taken a
15 lot of destructive testing to get that information.

16 In some cases, there is stuff you can't see.
17 This is work that is going on right now on the Eureka.
18 I don't know if you can see it, but just to the right
19 of the door there is a little sill plate under there
20 that is rotten. I missed that in the survey I did
21 because there was no access to it. There was no way
22 you would find that that piece was buried amongst all
23 that relatively sound structure.

24 So, I want to stress that you're not going to
25 get all the answers. You are just going to get real

1 close to it.

2 Just to finish up, I think that you should
3 also support the surveyor by providing him with all the
4 information you got prior to the survey -- plans,
5 photographs, documentation, previous surveys -- all of
6 that stuff. And try to get it to him as early as you
7 can so that they have some time to review that stuff
8 and it's not going on the clock when they're on the
9 job.

10 That's about it. Are there any questions on
11 this stuff?

12 [Applause]

13 MODERATOR McGRATH: Thank you. Don, if you
14 would like to sit here, I'd like to invite the rest of
15 our speakers. If we could have Glennie Wall, Karl
16 Kortum, Peter Neill, Don Birkholz, and Jim Delgado come
17 up to the table here. We have 15 minutes for
18 discussion for all of this morning's activities.

19 I'd also like to remind you that this
20 afternoon we have an hour and 30 minutes, I believe,
21 for discussion. So, we have tried to allow for plenty
22 of time -- in fact, probably too much time, but,
23 fortunately, as Karl let us know, there is a lot to
24 read on board Balclutha, so we do have a lot of
25 information.

1 So, I would like once again -- Glennie, if
2 you'd like to come up. We do have only 15 minutes.
3 Then we are going for a nice walk before lunch so
4 you'll all have a chance to stretch your legs. I know
5 Walter Rybka was waiting to pose a question. The floor
6 is now open.

7 MR. WALTER RYBKA: The question I was trying
8 to ask Jim Delgado was actually more of a comment on
9 the effort in Washington to try to evaluate vessels.
10 One of the inputs in that was listed as being the
11 survey that White Elephant was commissioned to do for
12 the Trust. That survey was not really very much for an
13 evaluation tool. It was an absolute baseline starting
14 point to attempt to get an inventory of what was out
15 there. It was limited in that it went out to people
16 that were on a known mailing list. It didn't include
17 others this we didn't know about, didn't know who to
18 send it to. It was limited in the response we get,
19 even though I thought it was pretty good.

20 And then within the questions answered, there
21 was a tremendous range of omissions there. So that was
22 viewed, that was commissioned as a data-gathering tool
23 for baseline information. Maybe you could start doing
24 some evaluation afterwards, but that was looked at as a
25 very first tier of what was to be a long process. If I

1 find out that that is being used in its state for
2 something that could have long-reaching consequences, I
3 find that extremely disconcerting.

4 MR. JAMES DELGADO: It is not going to be
5 used -- I mean, we are not going to take that as an
6 evaluative tool. The idea is to get baseline
7 information and just assess the known world, then apply
8 National Register criteria. So, in a sense, the White
9 Elephant survey would be used in one sense as simply a
10 starting point, as you'd intended it, gathering
11 together -- we realize the response was limited, and
12 it's not an end-all, be-all. It's just one other area
13 of information and knowledge to draw from and to
14 compare and to contrast to other sources so that we can
15 come up with as complete a listing as possible and then
16 apply the National Register criteria to them.

17 So, I can understand your feelings in this
18 matter, but I don't think there is any cause for alarm.
19 The nature of the survey is well known, and it will be
20 used in a responsible manner as an information tool and
21 not as a significance or priority assessment tool at
22 this time. We need to know what the known world is,
23 and the White Elephant survey was a very excellent
24 start towards assessing the known world.

25 Glennie?

1 MS. GLENNIE WALL: I was just going to second
2 that. I think that is what my colleague was getting at
3 when we said that the real fruit of this meeting is
4 going to be to say what we need to have in order to do
5 an evaluative inventory. Because we basically have
6 that with World War II vessels. I have loaned my copy
7 out, but it's a tome about three inches thick. We have
8 virtually examined every World War II vessel and
9 evaluated them against the National Register criteria.
10 And that is an evaluative inventory, when you look at
11 everything, the whole universe. These are the ones
12 that meet these standards, et cetera.

13 I think that is basically what we are going to
14 have to shoot for with regard to other areas of
15 maritime history, or what in the Park Service
16 nomenclature are theme studies, and look at everything
17 and compare what we really have, not just what can
18 respond. You see, that is a baseline. We can get an
19 indication, but you certainly can't proceed to evaluate
20 based on that. No, I agree with what Jim is saying.

21 I have xeroxed here a copy of a piece of
22 legislation. Everybody mentions this, and it's one
23 paragraph right in here, which I will leave out on the
24 table for you, that says what Congress is expecting the
25 Park Service to do.

1 And then attached to that is a memorandum
2 dated March 12th from the Associate Director for
3 Cultural Resources, Jerry Rogers, to the Regional
4 Director here. It's in response to a letter that I
5 wrote up through channels for the Regional Director,
6 saying: What is the status of that study? It is dated
7 March. It's pretty much kind of where we are going.
8 Those of you that have been involved will see where
9 there has been some movement, but basically that is the
10 track we are on.

11 I think you could say we are all proceeding
12 with caution as the way becomes clear.

13 MR. JAMES DELGADO: These really are the first
14 steps on a very long, long road that we all need to
15 walk on together, I think, Walter. We do need to
16 achieve some sort of consensus, at least here, and then
17 ultimately together in the profession.

18 MODERATOR McGRATH: We have a question in the
19 audience. If you care to address a question to a
20 specific person, if you would identify that individual.

21 MR. DAVID BRINK: Not necessarily, but to all
22 of us, this is a continuation on the same subject. And
23 to quote what Glennie is referring to, it says: The
24 committee directs the service in cooperation with the
25 maritime preservation community and the National Trust

1 for Historic Preservation to (1) conduct a survey of
2 historic maritime resources including those of the
3 service, (2) recommend standards or priorities for the
4 preservation of those resources, and (3) recommend the
5 appropriate federal and private sector roles in
6 addressing those priorities.

7 It's just to get back to the basic point that
8 we were talking about earlier, and coming back to it
9 now, this, in my mind, being a member of the task
10 force, which I think is where this whole idea of
11 standards really coalesced for the last three years,
12 where the idea of carrying out this mandate from the
13 Congressional authorities came to, leads us, and I feel
14 very strongly, to a position where we have a
15 broad-based constituency involving the Park Service,
16 representatives from the National Trust, and the
17 maritime community at large. And that is the group,
18 hopefully broadly and evenly constituted, that really
19 is the group that should look at this question.

20 I think it's a particularly critical one if
21 there is going to be a meeting in Washington on the
22 19th of September, some scant two weeks from now, that
23 that needs to be addressed.

24 I guess that goes to anybody who cares to
25 comment. Peter, Glennie.

1 MODERATOR McGRATH: That was David Brink who
2 just stated that question. Please identify yourself.
3 I know this sounds tremendously redundant and somewhat
4 absurd. But when we work off the transcript, we would
5 like to have your identification. So, before you start
6 speaking, please identify yourself.

7 Any further questions?

8 MR. DAVID BRINK: Is there a response to that?

9 MR. JAMES DELGADO: I have one response,
10 David, and that is we were anticipating this meeting
11 and this short course, in a sense, as an open forum so
12 that we could discuss these concepts and get some
13 direction from all of you, as you do represent, in a
14 sense, that broad base of the maritime preservation
15 community, so that some input could be sent back to
16 Washington.

17 The transcripts of what we say here today are
18 going to Washington and will be read and will be looked
19 at by those folks. I think it behooves all of us to
20 get in touch with them and comment to those people.
21 Again, the door is open. There is a spirit of
22 cooperation. There is no bureaucratic wall being
23 presented.

24 MR. PETER NEILL: In that regard, then, I
25 think it would be paramount that there be a

1 representative of the National Trust, representative of
2 the Council of American Maritime Museums,
3 representative of several other organizations chosen
4 geographically representing small craft, large craft,
5 et cetera, et cetera, present at those meetings. It
6 just doesn't seem to me to be appropriate for the
7 judgments that were initially implied and the
8 description of what is going to happen on the 19th and
9 20th to be left in the hands of two retired historians
10 from the Smithsonian.

11 MODERATOR McGRATH: Yes.

12 MS. GLENNIE WALL: I need to qualify that
13 There are also two additional people from outside the
14 Smithsonian. I don't know who they are.

15 MR. JAMES DELGADO: Perhaps you do need to
16 contact their Chief Historian.

17 MR. PETER NEILL: Ed Bahr knows the problem.
18 This has been discussed many, many times before. I
19 think it really, the point of it goes to, and I am
20 saying all of this as a collaborator and in the most
21 constructive spirit as I possibly can -- all I say is
22 that the National Park Service should enter into that
23 spirit as a collaborator in the construction,
24 constructive spirit of communication with the people
25 who are out in the field dealing with the same problems

1 that they are.

2 And the fact is that there are more
3 representive vessels on the National Trust survey than
4 there are on the National Register, and there are
5 literally thousands more out there that have not been
6 inventoried. So, for any judgments to be made prior to
7 that kind of baseline data work seems to me
8 inappropriate and is an attempt to try to shoehorn
9 something into a response for Congress, which is very
10 transparent. I really do feel that, you know, we are
11 not dealing with stupid people here. And they
12 understand the issues. I think we need to say that we
13 are facing these issues. This is what they are. These
14 are the people who are involved, and move forward in
15 that spirit.

16 MR. JAMES DELGADO: I think we definitely need
17 to move ahead with using the National Register, though,
18 and not to just throw the baby out with the bathwater.
19 There are problems with the Register, but I think we
20 can rectify them, working together. I think we can
21 come up with some constructive comments for some
22 different criteria and to the application of National
23 Register criteria. And by strengthening the National
24 Register as a planning tool through constructive work
25 together and through adequate National Register

1 documentation and getting the known world on the
2 register, I think we can benefit from using a system
3 which has worked worked quite well for 20 years, albeit
4 with needed change, and proceed without having to
5 invent a whole new system for prioritization and
6 quantification.

7 I agree that we also need to work together and
8 feel, Peter, that this constructive, cooperative spirit
9 that you speak of has certainly been entered into by
10 the Park Service through hosting this and entering a
11 dialogue.

12 MR. HERMAN SUDSHOLTZER: Suds Sudsholtzer,
13 retired from the Constitution. There are literally
14 thousands out there that Peter is referring to that are
15 not on the Register or aren't on anybody's list. They
16 have not been inventoried. You're advocating putting
17 them on the National Register, using it as a vehicle to
18 get a handle on everything.

19 You have to give those thousands out there who
20 are going to take their precious resources, to file one
21 of those claims, to sit down and go through the
22 bureaucracy of getting the thing filed with the
23 National Park Service -- there has to be a benefit to
24 it. There has to be a feedback. Just to to sit down
25 and do that -- there is, for buildings, 25 percent tax

1 credit. That is a super incentive to get your name on
2 the National Register. It does help for people who
3 have got -- like the Maine schooner fleet you were
4 referring to. Why? What's in it for them to sit down,
5 for every one of these boat owners to fill out a
6 National Register form? They're just not going to do
7 it.

8 MR. JAMES DELGADO: That is why we recommended
9 that if the law is going to be maintained, that we as
10 the maritime preservation community should lobby to
11 have it amended in such a fashion so that those
12 benefits are conferred to vessels.

13 Because I agree with you, Suds, there aren't
14 very many tangible benefits that somebody pragmatic was
15 going to look at out there and say, "Well, why put my
16 vessel in the National Register?"

17 Tax incentive credits are going to be a
18 tremendous boon to preservation and to that inventory
19 or evaluative process. But I think it also behooves
20 us, if we are going to go ahead and use the Register as
21 a tool, and I think there is a firm direction for that
22 in Washington, to go ahead and make sure that we've got
23 our cards on deck.

24 MODERATOR McGRATH: We have time for one more
25 question. I remind you, we have an hour and a half

1 discussion period this afternoon, so by no means does
2 this mean we are going to cut off the discussion. We
3 are going to eat.

4 One more question.

5 MR. JOHN WIZNUK: My name is John Wiznuk. I
6 am from the Maritime Museum in B.C. in Victoria,
7 Canada.

8 I just to want to make a comment on the course
9 objective and the tenor of the conversation so far. I
10 understand there are reasons that the course and its
11 bent is national with the U.S.A. But I don't think we
12 should lose sight of the fact that maritime history is
13 international. The community that you're talking about
14 is international. The standards you set should go
15 toward an international bent rather than just your own
16 thing.

17 MODERATOR McGRATH: Thank you. I'd like to
18 end the discussion right now. There are several notes.
19 We have another hour and a half, Peter, this afternoon.
20 So the discussion won't end. We are going to
21 temporarily take a time out and feed ourselves.

22 Session 2 begins at 1:00 p.m. on board the
23 ferryboat Eureka.

24 [Luncheon recess]

25 ---o0o---

1 MONDAY, SEPTEMBER 2, 1985

1:00 O'CLOCK P.M.

2 ---o0o---

3 MODERATOR McGRATH: We will begin Session 2,
4 Restoration and Preservation Work on Wood and Steel
5 Hull Historic Vessels.

6 Our first speaker, and his topic is going to
7 be discussing restoration and preservation work on wood
8 and steel hulled sailing vessels, Walter Rybka. He's
9 the Restoration Director of White Elephant Management.

10 MR. WALTER RYBKA: This series of slides does
11 not offer concrete rules, it doesn't even offer
12 consistency of decision-making. It's here to offer the
13 compromises that were made in different situations,
14 some explanation of why those decisions were made, and
15 then some generalities that can be brought forward from
16 that.

17 I think they illustrate prime problems in
18 preservation and things that are, let's say, not unique
19 to vessels but best exemplified in vessels. Most of
20 the concentration is on the Elissa, but we will start a
21 little background before that.

22 I like to take a long view of things. If we
23 are looking at preservation, for passing things on to
24 generations, we want ships -- the actual goal of museum
25 preservation is that you want your ship to last

1 indefinitely, so let's take a long view of a few
2 hundred years.

3 This first slide is the Castle of Harlech in
4 Northern Wales. It was built about 1280. That's about
5 800 years ago. It's still substantially intact, had a
6 little bit of restoration to the stonework in the
7 1920's. The most significant thing about this slide
8 for this presentation is what is missing. Now, what's
9 missing from this castle is everything that's made out
10 of wood or metal. The only way you can still tell what
11 was there in wood or metal is because of the stone that
12 is left around it. Now, in the case of a ship, you
13 lose your wood and your metal, and it's absolutely
14 gone.

15 Now, this is if you have some vessels in cold
16 fresh water. These are in Lake Windermere in England.
17 The Raven was built in 1870. The little vessel on the
18 right was an excursion boat built in 1869. They are
19 very nearly intact. They have been in freezing cold
20 fresh water for their entire lifetime and stored
21 indoors in boat sheds in the winters for part of that.
22 That is a beautiful way to be able to do it. That is a
23 wonderful example of preservation of an intact
24 artifact. Let's hope they can stay in that condition
25 for centuries. Most of us don't have the opportunity

1 to have or work on things like that.

2 This is HMS Victory, built in 1769. It has
3 had numerous rebuilds, sometimes as a result of repairs
4 in action. In the slow course of events, this vessel
5 is once again being rebuilt, and this time around, all
6 of the substitution timber is no longer going in as
7 English oak and some teak or variety of other hard
8 woods. It's entirely being reconstructed in teak,
9 because they're just hoping to solve the problem that
10 way, of the constant, constant decay and degeneration
11 of timber.

12 The sizes of material there are just
13 incredible, as is the expense, as is the labor. And
14 maybe they will get some more years out of it before it
15 goes on. But it's a process that goes from one end of
16 the boat and back to the other, and they have been
17 working on this since about 1924. I don't know how
18 long they have elected to do their renovations in teak.

19 The rigging is largely substitute out of
20 synthetics, but that was a constant renewable element
21 anyway. I really don't know how long an individual
22 piece of rig lasted. Probably until they decided to do
23 something foolish and shoot it all away. But even in
24 natural service, it was in constant renewal.

25 The complexity of it is incredible. The

1 process of renewal is more one of maintaining the
2 knowledge and the skills than it is the maintaining of
3 the material.

4 This, we believe, is Elissa. This is a little
5 picture that Karl Kortum found of a vessel in the log
6 wood trade. We have no direct evidence that it's
7 Elissa except that it was taken in Campeche. She was
8 in Campeche for mahogany cargo in 1910, about the time
9 the picture was taken. And if that's not her, it's at
10 least another one built by Alexander Hall.

11 By the time we acquired the vessel, this is
12 how much had been lost. Much of what was left was
13 paper thin. So, the process of attempting to restore
14 the vessel to reach until we reached that point was a

compromises, starting
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1 on the accommodation deck flat, and that plate was
2 kicked through. These plates are welded. They were
3 not our renewal. They were renewal that was done 20,
4 30, 40 years ago during the life of the ship.

5 The conversion to a stern frame auxiliary
6 power happened when she was 38 years old. So, the
7 ship's structure had already reflected quite a few
8 changes.

9 In the process of making good the strength of
10 the hull, we had found that there was so much work to
11 be done that it was an economic decision not to do it
12 as riveted work. We ended up renewing about 25 percent
13 of the shell by weight, and that left us flat broke as
14 it was. And riveted work being five to six times the
15 expense of welded work, we ended up going back with
16 mostly welded plate. The structure was even altered to
17 the extent that since the thinnest part of a riveted
18 place was usually right along the line of the seams, we
19 had to move up four inches and move down four inches to
20 to get good metal for attachment in many cases.

21 There are several generations of shipbuilding
22 technique reflected here, to welded renewals and
23 riveted to the frames, to all riveted, to all welded.

24 The ship was open as a basket for about seven
25 months. During this time, the criterion against which

1 the decisions were being made was reclassification of
2 the vessel with Lloyds Register. So, the criterion for
3 condemning a plate was whether they considered it to be
4 fit for ocean service. We had 7,000 miles of water to
5 cross to get the ship home. At that time, we thought
6 we would be able to restore auxiliary power and motor
7 it back, and so there was always this little voice in
8 the back of my head taking thickness measurements that
9 said, "Walter, how long can you tread water?"

10 [Laughter]

11 MR. WALTER RYBKA: It usually resulted in
12 another plate coming out.

13 The bow had been altered from collision damage
14 years before. We were fortunate in that there was a
15 researcher, James Henderson, who found the offsets, the
16 builder's offsets. So, we lofted the offsets and put a
17 wood template up, agonized for days over the shape of
18 it, then finally gave permission to go ahead and build
19 it.

20 We eventually got the ship towed back to the
21 states. This sequence skips around a lot of the exact
22 sequence of restoration because this is meant to show
23 certain problems and solutions. In this case, almost
24 the entire stern of the vessel has been reframed and
25 replated. The deck beams above had lost their camber,

1 had sagged in shape. In that sense, we saved original
2 material by jacking them back to camber and adding
3 stiffening bars top and bottom and making I-section
4 beam out of it.

5 However, that cost us later, because the
6 boxing for the wood interior had to increase in size,
7 changed the moldings, changed the trim, changed
8 everything. I didn't realize it at the time.

9 Later on, fo'c'sle head deck that had been
10 replated in steel at one point, we went back to the
11 original configuration. A lot of jacking and pushing
12 was needed to restore camber. However, in the
13 collision bulkhead there, which is also the fo'c'sle
14 bulkhead, we did do a plate renewal as riveted work.

15 The decision on riveting versus welding, we
16 did more riveted work as our capability grew or as
17 there were areas that we could afford the cost of it,
18 or there was a small area, or the appearance would make
19 it more advisable to do it there.

20 For most of the main deck renewals, it was a
21 tremendous amount of steel work to renew -- the
22 stringer plates, a lot of the deck beams, some of the
23 deck beam flanges, hatch coamings. We went to a major
24 shipyard to do that. It was done as all welded work.
25 We had a lot of problems with that. Basically it

1 represents some of worst work on the ship.

2 Now, it was a real lesson because we found
3 that you really have an uphill problem attempting to
4 get restoration work done in a modern commercial
5 shipyard. The reason is not that the modern yard and
6 its people are totally unskilled. It's that their
7 orientation is 180 degrees from what you want. A
8 commercial ship owner wants his ship back in service
9 earning money as soon as possible, preferably
10 yesterday. The yard service attempts to get the ship
11 out with reasonable enough repair to live out its
12 economic usefulness. A museum ship usually doesn't get
13 to be a museum ship until its already been condemned
14 for any commercial purpose. And by the time you get it
15 there, you don't have much money. You want it to last
16 forever, and you want it to look beautiful.

17 So, you're already starting out at about 180
18 degrees from where the yard is. So, it's a problem of
19 communication, more than anything else, to get what you
20 want.

21 Now at this time, after we had been in the
22 yard, the main deck laying and the deck laying was done
23 as an in-house job with our own crew. We also did
24 sandblasting and painting the hull, and used a modern
25 coating system and built it up very heavily. All

1 through the restoration, we did everything we possibly
2 could to build longevity into the work. We put a very
3 high priority on that. Because from all the evidence
4 of 97 years of the ship's life to that date and from
5 all the evidence of looking at museum ships all over
6 the rest of the country, the only thing you can
7 absolutely, positively count on that your ship will
8 receive at some point in the future is neglect.

9 This shows where most the amount of welding on
10 the ship was. We kept the seam, lines of plate, but
11 there is a real aesthetic loss there compared to a
12 vessel like this little intact Scottish trawler, the
13 Lidia Eva, that's in London. You look at details of
14 the riveting, of the seam lines, of the structure of
15 how it's put together, the biggest area where, when you
16 do substitute work and preservation, where I think you
17 lose the most is in the transfer from riveted to welded
18 work. And it's usually on the grounds of cost.

19 In a large wooden structure, the way it was
20 built in the first place is probably the best way to
21 put it back. There are some minor substitutions here
22 and there, but if it's built out of heavy plank on
23 frame, it will go back as heavy plank on frame. But if
24 it's built out of plate, it would be lovely to see it
25 riveted. That is where the guideline might say: Do it

1 wherever you possibly can, especially in areas where
2 it's going to show, where it's going to be visible.
3 But the fact of the matter is that the labor intensity
4 and the cost of the work is a tremendous increase.

5 In Elissa's case, we had the new bulwarks
6 welded, but we still had the holes to the sheerstrake
7 that would have had to be dealt with. So, the bulwarks
8 were reattached to the sheerstrake by riveting. It's
9 Steve Hyman driving them there.

10 All in all, quite a lot of riveting was done
11 in the course of restoration. Eventually we made it a
12 policy that all of the little fittings, all the little
13 details that would add definition, that had these sort
14 of sculptured effects of flanges, bevels, rounded
15 edges -- they just wouldn't look anything close to what
16 they should be if they were welded. We made sure we
17 put those on as riveted work.

18 It's one way that we bumped up our budget
19 unwittingly. When we first did this, we didn't realize
20 that we intended to do that good a job. As we got into
21 it and got better and better at it, we kept raising our
22 standards, and so we kept raising the time it took to
23 do anything, so we keep going steadily and steadily
24 more over budget, because we were determined to do a
25 better and better job.

1 FROM THE FLOOR: You never admitted that
2 before, Walter.

3 [Laughter]

4 MR. WALTER RYBKA: Now, this is the original
5 companion-way and skylight that were on the raised
6 quarter deck aft. The only reason they survived is
7 because they had been built into the deckhouse that had
8 been built on as a motor vessel, so they spent the last
9 40, 50 years enclosed. They were in very poor
10 condition. This is a case where we were able to retain
11 the material and do restoration of it, do repairs to
12 it. One of the cabinet makers that worked on it said,
13 "This isn't carpentry, this is dentistry."

14 Probably about 60 percent of the wood is
15 original and remains in that. Another sideways one.
16 New corner posts for the skylight.

17 The thing we discovered here was that in this
18 case, it probably only cost us about twice as much as
19 new construction to retain these pieces for the work
20 that went into them. It was still eminently
21 worthwhile doing. It's some original fabric of the
22 ship. It has character. You see some of the wear
23 marks and the chafe it's had over the years. But in
24 this balance of what you can afford to do, what you
25 can't afford do to, this is a case where we had the

1 piece, we could use it, knowing full well it was
2 costing us twice as much to do so. There, they have
3 eventually found their way back into the ship.

4 Here is an area that can be discussed at great
5 length. When do you stick exactly faithful to the
6 original design -- even though you know it was a
7 maintenance problem -- or when do you make some
8 changes? In this case, because I knew that the ship
9 could only count on neglect in the future at some
10 point, this arrangement of manhole and pump wells is
11 put in with margin planks fitted around it, instead of
12 just cutting a hole afterwards through the planking.
13 That is so you can do a better job caulking it, you can
14 keep it tight.

15 If you go over and look at the Balclutha and
16 look at the planking bulged up from the rust around
17 that over the plating, look at the completely
18 rusted-away tween deck beam below that level, you know
19 that's a chronic problem in old ships. This was our
20 decision to build longevity in.

21 The taffrail here, 25 stanchions were needed.
22 We had about 17 originals. All of them needed new tops
23 and bottoms. We had some new ones cast. Right now, I
24 couldn't tell you which ones are the new ones and which
25 are the original ones. But 17 out of 25 are original.

1 The deckhouse is all new construction. The
2 only information we had for it was the first Lloyds
3 register survey report, which said it was 13 by 14
4 feet.

5 The accomodations were all new construction,
6 but we had the moldings and the patterns from the old
7 accommodations. But after we had done so much work to
8 the deck beams, so much work to the accommodation deck,
9 so much work to the shell, even if the material had
10 been in good enough shape to reinstall, none of it
11 would fit.

12 The arm rest of that settee is original. The
13 gradings are cast off of one surviving. Where we knew
14 something about the ship, we used that detail.

15 One of the things that was gone through in the
16 design process for it or the research process was
17 making a drawing list as if you were building a new
18 ship, of identifying all the parts. Then next to that,
19 we put a source of information. Is it archaeological
20 evidence off the ship? Is it a photo? Is it something
21 that still exists on the ship? Or, if it's nothing --
22 and for about three-quarters of the ship, that was the
23 case -- what's our best guess going to be based on? It
24 was ships of the same builder.

25 Chain plates. We had one surviving. We found

1 a good blacksmith, a fellow named Joe Pahauski, who
2 built these chain plates. One of the things we went
3 through was this constant ballot between how we were
4 going to achieve doing something -- even if we knew the
5 shape of it or the function of it. This fitting is
6 being put together as an all-welded piece. We got a
7 mix of welding, casting, and forging on this job. It
8 was mostly a matter of figuring out who could do the
9 piece. We made a lot of mistakes. Some were in-house.
10 Some of the mistakes were in going to vendors who did
11 welded fabrication work who just didn't understand what
12 we were after. One of the most common things we found
13 was that somebody would put a lot of weld on something,
14 then you tell them you want it ground smooth for a
15 nice, fair appearance -- by the time they got through
16 grinding it, you didn't have any weld left. So, it's
17 that communication of what you want, what the standard
18 is, what's the appearance that is so difficult to
19 achieve. Eventually, Doug McClean, who was an
20 apprentice on Steve's crew, went to work with Pahauski
21 for a little while, started learning some basic
22 blacksmithing skills, worked on making a lot of the
23 simpler fittings, eventually started turning out more
24 and more of the fittings in-house, and the capability
25 grew.

1 These are topsail parrel buckets which were
2 made by Pahauski.

3 One thing, when you get into this and you
4 start looking at each piece, is that each piece is a
5 little piece of sculpture, so it's worth all the
6 attention and detail you wish to put to it.

7 Then came the job of assembling the entire
8 "kit." The noteworthy thing here is that it's more --
9 the process of doing it is as much the product as the
10 end result. It's that process of learning everything
11 that goes into putting it together and going through
12 the steps and assembling it, because that's the process
13 of maintaining it and keeping it.

14 The hardest thing to maintain is the
15 continuity and knowledge, more than the quality of
16 pieces or the continuity of fabric. This is our jib
17 boom, but this isn't the initial restoration. That jib
18 boom has been in and out two or three times. We run it
19 in if we go up to Houston or go to dry dock so that the
20 tugs don't get a chance to break it off. That is a
21 standard operation of seamanship, is getting to be
22 routine.

23 Almost everything in the ship is done with the
24 main deck capstan. That was our hands-down best
25 investment, is the source of power for everything that

1 gets done in the vessel, sending yards up. The
2 important thing about the sequence and having it done
3 with all in-house crew and with a lot of volunteer
4 participation is that now we don't like to leave any of
5 those yards up for more than two years. They get
6 rotated down to deck. So, it had been a job that had
7 to be done entirely by professional crew the first time
8 around, and it usually gets done now on a monthly or
9 yearly basis with one rigger, who had been an
10 apprentice during the restoration, who now teaches four
11 or five volunteers, but that topsail yard goes down on
12 the deck this winter again. That is how we can
13 persuade it not to rot.

14 A tremendous amount of material went into the
15 rails. This is four-inch teak. It's being shaped
16 down, and eventually we got back from all that little
17 gathered archaeological evidence to something like that
18 of a form of a ship again.

19 Now, the figurehead had more argument involved
20 than almost anything else in the ship -- not only in
21 terms of what she looks like, but how big it ought to
22 be, what angle it ought to be at, and eventually got
23 one on there. The detail that went into this, into the
24 investigation was a real learning experience for me,
25 because I hadn't the slightest idea that it could be

1 that complicated. Until you looked at it, you never
2 had any idea what the ramifications were of leaning it
3 forward another two degrees and how much space you got
4 of the head under the bowsprit, or maybe the bowsprit
5 was at the wrong angle, or maybe the whole thing ought
6 to be further forward. The key thing about a
7 figurehead is not how well the statue is carved, it's
8 how well it fits the ship and sets off the lines of the
9 ship. It's just a real little example of one of those
10 details that, well, everybody knows it's got a
11 figurehead and it's a beautiful piece of carving, and
12 it's a difficult piece of work, and we'll go at it and
13 do it. But when you really get into how are you going
14 to make it just right for this ship, it turns out to
15 have far more to it than meets the eye.

16 Now, eventually, after the ship got put
17 together, the next big step came, and that was figuring
18 out how to use it. We did dockside crew training and
19 drills, and people worked aloft for quite a few hours
20 and pulled and pulled and pulled in simulated drills
21 that sometimes didn't finish up until well after dark.
22 Nobody was allowed to turn the lights on until
23 everything was coiled down so people could find things
24 in the dark, and eventually got the ship out sailing,
25 because this had always been a primary goal of

1 restoration.

2 Now, the real thing that we realized only
3 after we'd gotten most of the way through the
4 restoration is that no matter long and bloody a way
5 restoration is, it's merely the price of admission to
6 the game of: How do you make it work and take care of
7 it afterwards, year after year after year after year
8 after year? And we are just starting on that process,
9 and we are still learning about it as go along. Some
10 other ships have been at it longer. But the key
11 element here is that the program or the process or the
12 knowledge is far more important than any one piece of
13 equipment. It's the key to hanging on to the equipmet
14 and getting it and doing what is needed.

15 After this initial restoration, we had a good
16 proof of that this last summer. After the ship had
17 come all the way from here to there, we had a dry dock
18 break its moorings and come across in a high wind and
19 smash the pier and stove in our stern. The damage was
20 far more extensive than that. Deck beams were buckled,
21 stringer plates pulled down, wood buckled up. It took
22 all summer to put it back together again. But the
23 important thing here is that process of putting it back
24 together again had taken several years of building up,
25 so we were able to do it as an entirely in-house job

1 and get exactly the results desired.

2 The first thing was to recreate the shape and
3 do all the projections and lofting, template it in
4 plywood, because anything you can persuade the plywood
5 to do, you could persuade the steel to do. Those plates
6 are partial cylindrical rolls. The camp frames all
7 have different bevels because they cross the axis of
8 the cylinder. Those were all done as forgings because
9 they would not look the same if they were simply bent
10 angle. And it's a real complicated explanation as to
11 the difference between forging and flat or just bending
12 an angle. But believe me, there is a difference.
13 Those probably took five to six times as long to get
14 done as if they'd just been a bent angle.

15 After templating and rolling, a knuckle had to
16 be put in for riveting, because the old plates were
17 still left, so these would be riveted back. So, a
18 mandrel, a form, had to be built for the curve of each
19 plate, and each of the four was different. Then, after
20 great heating and slamming, the plate came down,
21 eventually got worked into shape, the the ship was able
22 to sail again last fall.

23 The process of going through this is what
24 hangs on to the continuity required, because the
25 material itself is virtually ephemeral. That is

1 something I learned last summer. All that work that
2 had gone into the restoration went into getting planks
3 without a knot for the deck and to using zinc and epoxy
4 and heavy duty coatings on the steel, and to buying the
5 best of teak for the rails that probably would have
6 lasted 100 years if left alone. But the fact about
7 ships is, they usually don't get left alone.

8 So, two years after all that work had been
9 done, it was smashed to splinters. But it all got put
10 back together again because the process had been
11 recreated.

12 Now, when we get into talking about guidelines
13 or standards, there are all these little conflicting
14 requirements for what you want to do. I am not
15 suggesting that every vessel should be restored to
16 sailing condition. If the vessel is intact as an
17 artifact, there is tremendous value in maintaining it
18 intact as an artifact, although I do believe that the
19 only way you have a prayer of doing that is if it
20 becomes an indoor artifact.

21 If the vessel stays out in the weather, it's
22 guaranteed to require renewal, it's required to be
23 going through this process. It might be such a slow
24 process that it doesn't even happen within your
25 lifetime. Once the ships have ceased to be in

1 commercial operation, which is only intended to be for
2 25 years or so, 30, 40 years, and maybe they have
3 surprised us all and lasted 50, 60, 70 or 100, if we
4 are going to go on for century after century with them,
5 that means you're standing watches for decades and
6 relieving them by generations. So, the hardest thing
7 to maintain is that process, that continuity.

8 The biggest lack in the Elissa restoration was
9 oral history. There were so few people to be asked
10 directly. One of the greatest insights I got was once
11 when I visited Captain Klebingat while he was still
12 alive. I asked him how this was done and I asked him
13 how that was done. And he said, "Any damn way that
14 works."

15 [Laughter]

16 MR. WALTER RYBKA: He said, "Every time we
17 took a new ship in the builder's yard, we usually had
18 to change half the damn rig on the first trip out."
19 That is because I asked him how they managed to get
20 this out or work it all out without drawings. Well,
21 the fact is, they didn't do drawings. The fact is, in
22 a lot of the leads of the running rigging, they didn't
23 work it out; the crew worked it out later.

24 So, all these little things of knowing how it
25 was done, it gives you an idea of what they had in

1 mind. The biggest thing to figure out in doing this
2 process was: What did they have in mind when those
3 guys did this in the first place? It would have been
4 wonderful if there were more people to ask.

5 Oral history is the easiest thing to lose.
6 It's the easiest thing to lose track of. We have
7 already lost most of it. And I think an extremely high
8 priority ought to go into getting whatever you can out
9 of the brains of the people still alive. Just any
10 little bit of knowledge that somebody can ask you or
11 toss off in a casual comment can save you months of
12 investigation or just save you from doing the wrong
13 thing, no matter how much investigation has gone into
14 it.

15 In keeping a ship as a museum, even if you are
16 willing to do renewals and still want it to look as
17 good as possible, there are all kinds of compromises
18 that are just forced on you. Some are, let's say,
19 regulatory compliance -- might be fire access, might be
20 sprinklers, might be electric light systems. I think
21 always the safety consideration has to dominate.

22 Some are: Will you make a large change in the
23 vessel in order to be able to make another use of it?
24 I think if you are going to have to make such changes
25 towards regulatory compliance, like in Elissa's case,

1 maybe, putting in bulkheads throughout or double
2 bottoms or things that would be necessary to make a
3 sail training vessel out of her, I don't think you'd
4 pass anyway. But let's say even if that was an option,
5 you would so alter the character of the vessel that
6 perhaps it's not worth doing.

7 I think for any ship that is pretty much
8 intact, where you have the original pieces, I don't
9 think you should do it, to alter the vessel to be
10 something she wasn't. I think it's better to build a
11 replica or build another vessel. I will discuss that
12 more tomorrow.

13 However, if so much of the vessel is missing
14 to begin with, perhaps the only way that the vessel is
15 worthwhile or works out is if some of those changes are
16 built.

17 If the goal is to be a museum, you have little
18 conflicts between wanting to present the ship as much
19 as it looked like and still being able to get the
20 public aboard. On Elissa, we lose a lot of space to
21 gangways and railings. But that is because we have to
22 keep the hatches battenable so we don't cut into the
23 hatch coamings. But we lose that deck space when
24 visitors are on board. It's a bit of a compromise.

25 Ideally, you'd want to see the ship with as

1 much of its rig and cordage in place, but then that
2 becomes more of a headache for the maintenance, so we
3 downrig most of it in the wintertime. The rig is up in
4 the summer when we are training the crew.

5 There is this constant process of saying,
6 "What are you going to do that's going to hang on the
7 ship?" And that, I guess, is the place I always come
8 on the strongest. Is it going to take good care of the
9 ship? Are you being responsible to her? What is going
10 to make it last longest? If you have got a leaking
11 deck, I think it's irresponsible to leave it uncovered
12 if you can't recaulk it because it looks that way and
13 it won't look right to the public. I think half the
14 ships in the country right now need, more than anything
15 else, a tent or cover over them, because we are losing
16 that fabric. It's not that I mind replacing the fabric
17 necessarily, but you lose a lot of the documentation of
18 what it is. You lose a lot of the evidence. You lose
19 a lot of that. And it's a harder job and a more
20 difficult job. You don't know what you had. There was
21 so much conjecture involved in the Elissa restoration.
22 If you have a vessel that's intact, it's a document.
23 If you leave it out, exposed to the weather, without
24 taking sufficient care of it, so that this generation
25 can see it better in a museum context, that is a very

1 selfish thing to do, because you are guaranteeing that
2 this is the last generation that ever gets a look at
3 it.

4 How can the case possibly be made for greater
5 funding, for greater input into saving these vessels if
6 it always looks like it's all okay? The greatest need
7 is advocacy. If you put a tent over it and say, "Well,
8 you don't get to see the ship out in the open, in the
9 sky, because it's rotting away, and this is a natural
10 process, and we are trying to stop it down. This ship
11 is dying, and we are trying to save it" -- I think you
12 ought to interpret that process.

13 So, in working out guidelines, I'd say the
14 only thing that is rock solid is: How do you save the
15 ship? How do you hang on to the ship? What is going
16 to keep the ship through time?"

17 Am I out of time yet?

18 MODERATOR McGRATH: Ten more minutes.

19 MR. WALTER RYBKA: A couple little things.
20 Maybe I have covered it already. I think if you're
21 trying to restore a vessel to a given level of
22 appearance, I think one of the most pertinent questions
23 to ask yourself is: How would her own crew recognize
24 here in terms of a standard of maintenance, a level of
25 completion? If what you are trying to show the public

1 is what the life was like, what the time was like, what
2 the period was like, I think that is a real good
3 question to ask. "Is this the way it would look to the
4 crew? Does it work? Are all the pieces there?" That
5 is one way of arriving at a guideline or a standard
6 that you want to work your way through.

7 One thing that I think is really important to
8 discuss is, let's say, standards for maintenance or
9 continuing preservation or institutional policies.
10 Restoring the ship is one thing. I have shown a lot of
11 little compromises or things that influence various
12 decisions, and some of them are recognized museum
13 practice and a lot of them aren't. And that is fine if
14 that stirs up a good controversy. But as I said
15 earlier, the initial restoration is only the price of
16 admission for the long-running game. And so when you
17 are first taking on a project, I think the very first
18 thing ought to be stabilization, whether it's wood or
19 steel, perhaps even before documentation, because the
20 ships are sometimes being lost in an accelerating and
21 exponential rate. That's covers, that's coatings,
22 that's the basic seamanship of keeping the water on the
23 outside of the boat. Other little things, like if a
24 wooden vessel is exposed to hogging and sagging
25 strains, and they are from their own moorings, their

1 own weights -- basic, basic questions. Does the
2 distribution of weights within the vessel match the
3 displacement curve? You can take a lot of the sagging
4 and hogging moment out of the vessel with how gear is
5 stowed. You can take a lot of the hogging moment off
6 by shifting moorings.

7 And so, when a vessel is looked at as a
8 document, as a piece of the culture that we want to
9 maintain, that we want to pass on, we want to pass on
10 all the knowledge that goes with it. But first we have
11 to hang on it to.

12 So, some of the most basic questions really
13 have almost nothing to do with display or long-term
14 museum interpretation of the vessel. Some of the most
15 basic questions are: How do we hang on to it? A lot
16 of times, those don't even get addressed until a
17 problem shows up in the form of a structural failure.
18 Then people identify that, no, there has been a hogging
19 tendency for 20 years, or every time we haul it out,
20 the hog's getting worse and worse and worse. But that
21 is what ought to be looked at at the very first day.

22 So, I think if we are looking at standards for
23 preservation, preservation is such an all-encompassing
24 thing. I think a lot of it has to do with approaching
25 it with, let's say, a seaman-like attitude. One of my

1 favorite quotes is from Corey Cramer, who put together
2 the Westward Program, and said that he always felt that
3 heritage preservation was attitude preservation. And
4 so that means: How do you get the standard of
5 professionalism you want, or how do you set a high
6 standard? Well, perhaps if it's already ashore, a
7 wreck, a deteriorated condition, maybe it has to be
8 treated as an artifact, and then you treat it in the
9 best possible way of maintaining an artifact in static
10 condition. If it's still afloat, if it's still a
11 vessel, then you have to treat it as a ship, and then
12 developing that seamanship and continuing on with that
13 seamanship becomes the highest priority. Because if we
14 look at this slide and we go back to look at the slide
15 of Harlech, the ship has the potential to go on for 700
16 or 800 years no matter how many changes of fabric it
17 goes through -- as long as people care about it, as
18 long as people want it, as long as people will work on
19 it, as long as will love it. You will just keep going
20 through that process. But the actual bit of wood or
21 iron -- maybe it lasts long relative to our lifetime,
22 but it's pretty ephemeral stuff in a long span of time.
23 The hard thing to keep up is everybody knowing about it
24 and acquiring the ability by doing the work.

25 Questions.

1 MR. HERMAN SUDSHOLTZER: What I understand
2 you're saying -- and I agree with you a hundred
3 percent. I think too many people get lost in the
4 academic discussions of historic fabric, that we
5 shouldn't replace it. The castle, I thought, was
6 super, because there's no wood and steel in it. The
7 ship is the ship is the ship. And that is what's
8 important. Whether you have got original paint on the
9 outside or whether you got new high-tech coatings on
10 the outside, hey, you're taking care of a ship. The
11 ship is the ship is the ship. And that is the bottom
12 line.

13 And getting to discussions whether she's
14 original, how much of her is original, like I used to
15 get at Constitution all the time, really is immaterial.
16 Because ultimately, somewhere along the line, the
17 entire ship is going to be replaced and is going to
18 last infinitely, which is what the goal is.

19 So these discussions, "she's really not the
20 same ship any more," and all that stuff, if you have
21 had the same structure and had done nothing but go
22 through and replace and repair and maintain on a
23 day-to-day basis; you still have the same ship. And
24 that's what is important.

25 MR. KARL KORTUM: I think Walter's point about

1 the vessel being a document is a good way to look at
2 it. Every evidence, every little evidence around the
3 rails or other portions of the vessel is important and
4 is a minor document. And I very much agree to that way
5 of looking at what remains of the ship.

6 MR. HERMAN SUDSHOLTZER: Yes, I agree with
7 you, Karl. But that documentation has been taken.
8 That teak rail is back in place. Eventually that plate
9 that had the rust line on it, which was the document,
10 is going to have to be replaced -- maybe 80 years from
11 now, maybe 100 years from now, that plate is going to
12 have to be replaced at some time and will be. And the
13 document will have been lost which you had in the
14 meantime recorded.

15 MR. KORTUM: The recording is the document.

16 FROM THE FLOOR: You have replaced the
17 document with the new, the same document.

18 MR. HERMAN SUDSHOLTZER: But it won't have
19 that rust line in the plate any more.

20 MR. WALTER RYBKA: You'll get one before you
21 replace it again.

22 Is there anybody else? Randall.

23 MR. RANDY BIALLAS: We talked about this
24 again, Walter, but I'll take the opposite tack.

25 Traditionally, in the conservation community,

1 museum conservation or historic preservation community
2 with regard particularly to historic buildings, but
3 other kinds of historic structures that don't float, we
4 are very sensitive to historic fabric. As you know, we
5 feel we don't have a historic structure unless it has
6 its fabric. We have a real difficult time resolving
7 this attitude of replacement. I don't have an answer
8 to it because I realize that vessels, large ships, are
9 very much more dynamic than the historic structures
10 that we traditionally deal with. But it's going to be
11 very difficult for us to accept the idea of total
12 replacement fabric over even long periods and still
13 being able to think of this kind of structure as
14 something that is then historic.

15 MR. WALTER RYBKA: I'd like to respond to that
16 and say that I see that position for, let's say,
17 structures or for artifacts or objects. I think that
18 if you have the option of retaining historic fabric and
19 still presenting this artifact to the public and
20 interpreting it well, I think, by all means, that
21 should be done.

22 I think if it's a small vessel that can be
23 enclosed, I think that is worthwhile. If it's a vessel
24 that has so deteriorated that the only way to rebuild
25 it would be complete loss of original material, then

1 you really are looking at a replica. And if you are
2 going to retain the original, then somehow that is a
3 document and has to be conserved, then possibly
4 impregnation with different materials to hang on to the
5 fabric. I am not saying it's not a worthwhile approach
6 or that's not the way to treat artifacts. But I think
7 what happens is that when that kind of a standard gets
8 applied to floating vessels, they cease to be vessels,
9 have to turn into wrecks first, then somebody tries to
10 make them an artifact.

11 I think the way to hang on to original fabric
12 the longest is to do renewals as they're called for, a
13 bit at a time, and then the decay doesn't spread, the
14 structural distortion doesn't spread. I think a great
15 deal of the way structures get to the point where there
16 is almost nothing you can do with the whole structure
17 is because all the way along the line, somebody was
18 trying to patch this, putty this, hang on to that. If
19 somebody said, "I got a problem with this plank. I am
20 taking it out now. I am getting the deck tight now,
21 recaulk, no more leak," well, then, the deck beam and
22 the rest of the planks are going to last a hell of a
23 lot longer.

24 So, my position is that I think treatment of
25 an artifact is entirely proper to place as the highest

1 priority the conservation of fabric. I don't believe
2 that a floating vessel in its natural environment can
3 then be treated as an artifact or as a historic
4 structure. You might have to come up with a whole
5 different category for it, because eventually you will
6 have to renew it or lose it.

7 MODERATOR McGRATH: Okay. I would just like
8 to hold it right now. We will have a little more
9 discussion. I'd like to thank Walter for his talk.

10 [Applause]

11 MODERATOR McGRATH: Believe me, I don't enjoy
12 cutting off the discussion, but we do have other
13 speakers. I want to reiterate. Please identify
14 yourself when you make a comment. It's very, very
15 difficult to capture this important dialogue if we have
16 unknown individuals later on when we are working on the
17 transcript.

18 The next speaker I'd like to introduce is
19 David Walker. David Walker is a research associate at
20 the Maritime Museum of the Atlantic. I'd like to just
21 make a little comment right now. APT is a North
22 American organization. We have had a lot of discussion
23 this morning about the U.S. Department of the Interior
24 and the National Park Service. The one great thing
25 about APT and the reason I really have believed in the

1 organization is that it is a North American
2 organization, and certainly David, more than anyone
3 else here, did many, many hours of work to get many of
4 our Canadian colleagues here today. I'd like to thank
5 you, David, for that, because maritime preservation
6 isn't an American concern, it's an international
7 concern.

8 David Walker.

9 [Applause]

10 MR. DAVID WALKER: Thank you, Tom, for those
11 very nice comments. My topic today, I am not going to
12 bother with slides till I am finished. My topic was
13 the application of preservation technology.

14 The one word there that had me puzzled was
15 "application." So I went to have a look at what
16 application said. It said, "The act of applying." So,
17 I went to look for "applying," and it said, "The use of
18 for a particular purpose in a particular case." Now,
19 that then set the tone of what I am going to say.

20 I think, to start with, a vessel only comes
21 into our museum world and to the care and attention of
22 all the museum staff or volunteers who are working on
23 it when the former owners who were looking after it and
24 caring for it either abandoned or failed in their task.
25 I think this should tell us something.

1 [Laughter]

2 MR. WALKER: I stated in the abstract that we
3 must make a choice, and it must be honest, it must be
4 realistic, it must be based on objectivity and not
5 emotion. These words came up previously by some of the
6 other speakers, and I think it's very true. We must
7 look at this very, very carefully and in a very sincere
8 and objective manner.

9 The time to debate how the vessel was acquired
10 or why or with what objectives is over. Now is the
11 time for that really important question: How is the
12 vessel to be used as an artifact? We must be very true
13 to our institution, to the board, to the directors, to
14 the public, and to ourselves. Can we serve any good
15 purpose and will there be any benefit from Option No.
16 1? As I said in the abstract, there were two options.
17 You either went for a completely authentic restoration
18 or you went for something less. That's a word I am
19 going to come back to shortly.

20 The first option, if you take that option, is
21 going to be very difficult. But there are many good
22 and varied reasons for opting to follow the route.
23 Complete and faithful restoration of the original
24 fabric, wherever it needs attention, can only be done
25 by absolute scrupulous attention to authenticity in

1 every detail. We can hope to benefit from the value of
2 realizing what a true replica of the vessel was before
3 it got to the state of coming into our care. It's a
4 very dedicated route, and it will lead to finding out
5 all the genuine problems attendant to the original
6 owner and his vessel, how he dealt with leaky hatches,
7 rotting natural fibers in his rigging and sails,
8 fouling underwater hull, and all the myriad of
9 maintenance problems which plagued him -- and,
10 incidentally, still plague the ship owner in 1985.

11 We can do it, if the budget allows. We have
12 the research knowledge. We have the technological
13 ability to turn back the clock, whatever the result. I
14 have a good example of this particular type of
15 restoration. It's a vessel that came into the
16 museum -- and I not quite sure how it came into the
17 museum world, but it was a Tamar barge called the
18 Shamrock. It's in Coteal in Devon, England. She was
19 taken over by the National Maritime Museum in
20 Greenwich, restored with painstaking attention to
21 authenticity. The result is now a sailing Tamar barge
22 with a hull full of problems.

23 I talked to her shipkeeper master last summer.
24 He's very proud of the workmanship being done and the
25 way in which it was being carried out. The vessel had

1 been restored with only fully seasoned lumber. The
2 decks had only been caulked with elcon, cotton and
3 pitch. And the rigging was just about as authentically
4 classic as it could be assembled. The restoration team
5 had even returned to the original form of rig, spurning
6 the improvements which had been brought on the ship
7 from a successive line of owners and masters.

8 So, the end result, of course, gave the
9 skipper and his helper endless problems and headaches
10 and needless difficulties when sailing the craft.
11 Well, you can imagine what the maintenance is. But by
12 doing the restoration in this way and only by doing the
13 restoration in this way -- at least this is my
14 belief -- can exact lessons be learned of how our
15 predecessors worked and maintained their craft.

16 Where have any of you read in a book, for
17 instance, about the problems and effects of handling a
18 vessel in a sort of light or loaded condition with dry
19 sails, heavy, wet sails, very porous dry sails in their
20 original material -- flax or cotton or whatever they
21 were made out of? Only by this exact duplication to
22 original materials, I think, can we ever get a true
23 educational benefit from how the vessel owners
24 originally had their problems and how they solved them.

25 No way, I believe, in using modern materials

1 to replace any of these items will give the same
2 results. Any kind of synthetic rope you can think of
3 does not react the way a natural fiber rope will react.

4 Now, the end result, as I said, was one way,
5 and that is Route A. No one had ever accused this
6 vessel of being, say, a theatrical stage prop or a
7 visitor attraction or something less than an exact
8 replica of the vessel it originally was.

9 So, we have a positive answer to taking the
10 first option. The reasons are valid. The results have
11 merit. I admire you if you follow this route. Your
12 fulfillment and joy of knowing your craft is a
13 testament to the dedicated attention of the high
14 standards of marine restoration. You must also suffer
15 the atonement of having to maintain the vessel in the
16 same manner in which it was restored. And your budget
17 will probably become a slave to the craft.

18 So, we go to the second option. The second
19 option, the route that most of us follow, is some form
20 of substitution in virtually every area. Welding for
21 riveting. Fiber ropes made out of modern synthetics.
22 We all know the various ways. So, that then becomes
23 our second choice. And settling for something other
24 than the original duplication I don't believe means
25 settling for less. In most cases, it means that the

1 replacement, whatever area of the vessel you are
2 concerned with, is better, sounder, and more durable
3 than the original. Perhaps we should consider whether
4 the museum is crossing the border into theatrical
5 display whenever a substitute is made. I don't believe
6 so. Theatrical replication, to my mind, indicates
7 something less durable than the original quality.
8 After all, a stage set is only a temporary duplicate,
9 at best. And we are striving for durability in its
10 longest sense.

11 I believe a good interpretive display is at
12 one time an educational tool, an interpretive display,
13 and a historic artifact. The problem with a vessel,
14 whether it is floating static on dry land or in a
15 covered building is that it is a complex collection of
16 different materials and forms and situations which make
17 their interrelationship inherently difficult to
18 maintain. And, of course, the sheer size of a vessel
19 puts it ahead of anything but the largest of buildings,
20 which are, in comparison, rather simple artifacts.

21 So, a vessel must be preserved by methods
22 other than the original. How, then, are we to choose
23 the substitutes? Of course, this must depend on the
24 area of the vessel we are replacing, repairing or
25 maintaining. The first consideration must be

1 appearance. We must at all times maintain the look of
2 the original. In many cases, we are merely looking at
3 a coat of paint. Look around this room. What are we
4 actually seeing? It's merely paint. The light bulb is
5 about the only thing that's not painted. You're not
6 seeing wall, you're not seeing anything other than
7 paint.

8 Just think about this for a minute, and very
9 few of us do. But you really don't know that is a
10 piece of wood. You believe it is a piece of wood.
11 It's paint you're looking at.

12 Appearance. We must, as I just said, at all
13 times maintain the look of the original. The paint, of
14 course, is covering something we assume to be wood,
15 steel or similar material. And we assume the original
16 was constructed from this material. This then gives us
17 a great deal of latitude when it comes to appearance.
18 We are able to construct the duplication out of the
19 best and soundest materials available -- if we maintain
20 a good coat of paint over it.

21 My second consideration is durability. You
22 can't expect a perfect protection and camouflage from
23 even the best of paints. They're not impervious to
24 moisture and all the imperfections which pollute the
25 air. And, of course, the best of paint is only as good

1 as the painter who applies it. Therefore, the material
2 beneath the paint must be durable. Steel to replace
3 wood, fiberglass to replace steel, synthetics to
4 replace natural fiber -- all should be used when, and
5 only when, they can duplicate the appearance exactly.
6 And the word again is "appearance."

7 The third consideration must be ease of
8 maintenance. This is not simply a matter of replacing
9 the original material, as in the statement above.
10 There are choices to be made here which must be
11 considered when the durability option is taken. Some
12 durable items are easier to maintain than others.
13 Therefore, the consideration here must be to modify the
14 selection, or Item 2, and durability, whenever
15 possible, in order to achieve ease of maintenance.
16 These considerations will cut downstream costs
17 appreciably, so that the extra initial cost in quality
18 material will pay for itself.

19 With the three above considerations taken care
20 of in the planning stage, you have taken the step which
21 will enable you to present the vessel in the best
22 possible and most maintainable manner with the least
23 possible cost, theoretically. It is idealistic. I
24 know that. Most of us are working with very limited
25 budgets, quite frequently with unskilled volunteer

1 help, and these problems, we have to live with. I
2 don't propose to address that problem because I don't
3 have any answers.

4 What I believe is that working on a vessel
5 becomes part of a museum interpretive process. The
6 public should be keep well informed about the reasons
7 for inaccessibility of various areas, and, if possible,
8 they should be allowed to watch the repair process. I
9 think Mystic Seaport is an ideal situation, with having
10 the shipyard right off the end of their property, and
11 you can watch the actual restoration work on whatever
12 vessel they have in the dry dock. I think all of us
13 love to stand around and watch somebody else work. If
14 you can attract some museum attendants by letting them
15 watch you work, then it is a good purpose.

16 Now, in spite of the course material for this
17 talk, Tom sent me the Secretary of the Interior's
18 standards for rehabilitation and guidelines for
19 rehabilitating buildings. The purpose of this course,
20 I understood to be, creating standards for the marine
21 world. So, I read this booklet a couple of times. It
22 came to me that we really have a beautiful set of
23 guidelines already available. I opened the book
24 randomly and I decided that we could virtually
25 paraphrase every paragraph in that, the recommended and

1 not recommended areas of the publication, and we would
2 have almost all the answers we need.

3 We will have to go further in many areas
4 because there are some areas of a ship that don't exist
5 in a building. But we have a basic foundation right
6 there, and I didn't mean to use the word "foundation."
7 We have a basic keel right there --

8 [Laughter]

9 MR. DAVID WALKER: -- for creating our
10 guidelines. And it seems a very simple way. I am sure
11 nobody's feelings will be hurt if we start with that as
12 a starting point. To that end -- I am sorry, I don't
13 believe Tom gave a copy of that out to all the
14 participants.

15 MODERATOR McGRATH: I think that should be in
16 all your packets, the little brief synopsis of the
17 Secretary's standards.

18 MR. DAVID WALKER: I thought I was fortunate
19 in getting it. But after the preamble and the various
20 other comments and introductions and so on, when they
21 start out on the recommendations on the guidelines,
22 they put two columns out. One is the "recommended"
23 column, the other is the "not recommended" column. I
24 think it starts on Page 12. I don't have it here.

25 MODERATOR McGRATH: You actually don't have a

1 copy of the Secretary's standards.

2 MR. DAVID WALKER: It starts on Page 12. I
3 will read a couple areas. If you want to listen,
4 perhaps you can think back to the words I have changed.
5 I am going to paraphrase the first item in the
6 "recommended" column. Identifying, retaining, and
7 preserved hull features that are important in defining
8 the overall historic character of the vessel, such as
9 stem, stern, fo'c'sle, rails, caps, figureheads, and I
10 go on, as they did in the building, to describe
11 cornices and windows and door openings and all the
12 other things that constitute a building. We also have
13 items which must be treated in the same manner.

14 Then, on the other side of that same page is a
15 column of "not recommended" items, which reads like
16 this: Removing or radically changing hull fabric
17 features which are important in defining the overall
18 historic character of the vessel so that, as a result,
19 the character is diminished. Replacing or rebuilding a
20 major portion of the exterior hull material that could
21 be repaired so that the vessel is no longer historic
22 and it's essentially new construction. Applying paint
23 or other coatings such as varnish or vinyl to a hull
24 structure that has been historically unpainted or
25 uncoated to create new appearance. Now, there is an

1 item which we obviously have to look at with more
2 depth. This doesn't completely translate.

3 Another item, removing paint from historically
4 painted hulls or decks. Radically changing the type of
5 paint or coating and its color. There is another item.
6 I mean, bottom coatings a hundred years ago were
7 certainly not as efficient as ours today. We would
8 certainly have to look at that type of thing.

9 So, I really think that if we're going to
10 start getting guidelines, that the door is open for us
11 right there, that we can take that and build on it. I
12 just hope there are some people who will agree with
13 that.

14 That is the first item under "recommended" and
15 "not recommended" columns. Here we find what I
16 consider the first controversial item, in the last
17 sentence in the "not recommended" column. I would
18 suggest that the ship restoration, et cetera, et
19 cetera. We know all the reasons. They are three-fold.
20 The vessel is now static. Most vessels are static.
21 So, fouling paint is not too important. When you have
22 a ship sitting here, I don't think you need
23 anti-fouling paint.

24 Yet modern preservatives such as coal tar,
25 epoxy or something of that nature is essential if

1 either a wooden or steel or an iron ship is to remain
2 in the water for any length of time. This is
3 non-historical. But I think we have to give it more
4 consideration. Perhaps I should have gone further and
5 read what the building suggests they do with roofs. I
6 am sure they will allow you to put other things on than
7 what they put on a roof 150 years ago.

8 So, a rather simple change will cover in the
9 "recommended" column a cogent situation for underwater
10 hulls. This type of comparison can take care of much
11 of this book's list of practices to follow and to
12 avoid. What it doesn't cover are the myriad of
13 appendages to a vessel's hull -- such as engines,
14 auxiliary machinery, masts, sails, and rigging. These
15 will need to be dealt with singly and in a systematic
16 manner. In order to satisfy myself of the
17 possibilities of dealing with the ship restoration
18 standards through the paraphrasing route, I opened the
19 book at various random pages and found that much
20 similar work could be done in a similar manner.

21 On Page 39, for example, is an interesting
22 item. Under the heading "Design for Missing Historic
23 Features," they recommend designing and installing a
24 new interior fabric or finish if the historic feature
25 or finish is missing. This could include missing

1 partitions, stairs, lighting fixtures, and bulkhead
2 coverings, or even entire compartments -- if all
3 historic spaces, features and finishes and fixtures are
4 missing or have been destroyed by inappropriate
5 renovation. The design may be a restoration based on
6 historical, pictorial, and physical documentation of
7 the new design that is compatible with the historic
8 character of the vessel. There's hardly a word of
9 change there. That suits our purpose entirely.

10 "Not recommended," creating a false historical
11 appearance because the replaced feature is based on
12 insufficient physical historical and pictorial
13 documentation or on information derived from another
14 vessel.

15 Now, again, the possibility there that they
16 may be wrong. Introducing a new interior feature or
17 finish that is incompatible with the scale, design,
18 materials, color, and texture of the surviving interior
19 features and finishes.

20 I believe this document can be produced and be
21 in every way as useful a guide to the marine historical
22 restoration field as the document is to the restoration
23 architect. It will not be as completely elementary as
24 I am suggesting, the translating, in both instances,
25 but I believe that without bogging down on every tiny

1 individual detail, which tends to particularize a
2 document -- and I think this should be avoided. This
3 is a very general booklet. We should not detail and
4 get bogged down on this detail. This, I think, then
5 comes to be another set of restoration detail work.

6 But the guidelines is a generalization. We
7 should have, then, a very useful working tool to guide
8 the planner in his task through the intricacies of
9 marine restoration. It's not a how-to-do-it manual,
10 and we should not confuse it with such. It's a
11 standards manual only. We can deal with the how-to-do
12 manual next year.

13 I have a few slides just to show you what we
14 are doing at Halifax. If I could have the slides,
15 please. This is the CSS Arcadia. She is a
16 steel-hulled riveted vessel which was built in New
17 Castle in 1913 for the Canadian government as a
18 hydrographical research vessel. She has got an
19 interesting history. She was in the Canadian Navy
20 during World War I and World War II, as a training
21 vessel and a guard ship, and went out of service, I
22 think, in 1969, mainly because her boilers wouldn't
23 pass inspection. She had up until that time been
24 coal-fired, and then she was laid up at the Bedford
25 Institute of Oceanography, who were her operators, and

1 they maintained her reasonably well. They kept heat on
2 board and they had a watchman on board. And
3 occasionally she was open to the public.

4 When the maritime museum came into existence,
5 she was transferred and came under our care about three
6 and a half, four years ago. The result you see here.
7 Another shot.

8 She has been modified extensively. The
9 superstructure as we see it there, forward there, is
10 entirely new. It was put on in about the mid-Fifties,
11 early Sixties, and contains a number of cabins and
12 offices which were not in the original ship. But the
13 rest of it is essentially as she was built.

14 Now, after some restoration, a survey of the
15 vessel, we found a number of areas in detail that were
16 in trouble. One of them was the underneath, the blake
17 stopper, so that the whole thing was removed and new
18 blocks of wood were put underneath.

19 Here is one of her more interesting -- we,
20 incidentally, are fortunate to have a very good
21 contractor who comes aboard with his crew and very
22 conscientiously gives us a good appraisal of the work
23 to be done and carries it out with a thoroughness which
24 is quite surprising in this modern day and age.

25 This is our main mast which was in trouble in

1 half a dozen areas along its length. Rather than
2 putting a new mast in, which would have been very
3 expensive, he scarfed end pieces all the way up.
4 Sorry. These are very mixed up. That is the block of
5 wood under the stopper. The afterdeck after
6 restoration. We have done some work to it since that
7 time. This rail has been replaced. The original rail
8 had been removed on the afterdeck. I will show you.
9 We have a pointer. You can see the line across the
10 deck there. There were davits along there and further
11 down here. And they carried two extra work boats port
12 and starboard. They were removed. This rail up here
13 has since been replaced with guardrails, which, again,
14 we had to cast.

15 I don't know why I included that one.

16 [Laughter]

17 MR. DAVID WALKER: Well, she was docked, just
18 after we acquired the vessel, she was docked, and while
19 she was on dry dock, we did an extensive survey under
20 the hull. Perhaps I should mention, I am a marine
21 surveyor as well and can occasionally come in useful
22 for the museum in this area. I didn't find -- I went
23 over -- God knows how many rivets I tapped. I could
24 not find one leaky rivet on the bottom of this vessel.
25 There were a number of welded patches, but essentially,

1 she is still the sound vesel she was.

2 She was built to Lloyds highest class, and she
3 was also ice-strengthened -- not an ice-breaker, but
4 she was ice-strengthened, and she's very, very soundly
5 built. I think she was probably built at about the
6 peak of the riveted ship construction era. By the time
7 the First World War came around, quality had to
8 diminish because of speed, and then, between wars,
9 welding became common and, of course, it's since
10 disappeared.

11 This is before restoration. It now gleams,
12 through a combination of professional and volunteer
13 help. This is while it was in the yard. Now, I will
14 concur with anyone who that says shipyard workmanship
15 is certainly not compatible with museum requirements of
16 quality. We had the entire hull sandblasted. We were
17 trying to control it. At times it was very good. At
18 times it was abysmal. We had a number of frosted glass
19 windows as a result of the eager sandblasting. They
20 did replace them, but it's just an annoyance which you
21 would not have if you had sympathetic shipyard workers.
22 But they just don't have the training or the empathy
23 with our requirements.

24 That is the vessel that I spoke about earlier.
25 She is a beautiful little gem. She goes out sailing

1 down the Thamar river regularly. It dries out twice a
2 day, and has a number of problems caused by that, of
3 course, because it does stand to change her shape.
4 They lug aboard I forget how much tons of sands every
5 time they take it out sailing and take the sand off
6 again when she is lying as an exhibit.

7 We did not take this into the museum. It's a
8 summer visitor. She is the last of the Canadian
9 Corvettes, as they like to say. It is difficult to see
10 from this photograph, but you can see that little part
11 is riveted. You go to this area and you've got patch
12 plates. She was built, started in 1941, and went into
13 service late in '42 as a warship. She had boiler
14 failure, and the Navy, rather than take her out of
15 service near the end of World War II, put her into
16 hydrographic for them, accoustical studies and that
17 type of thing. And so when all the other Corvettes
18 were getting scrapped with old warships, all the small
19 warships after World War II, she survived. They kept
20 her in service up until quite recently. Then she was
21 going to be sold for scrap. An enthusiastic group of
22 naval officers, serving and retired, formed a trust,
23 and they recreated this warship. I mean "recreated,"
24 too, because from the fo'c'sle deck up, this entire --
25 everything you're looking at there, except the mast, is

1 entirely new construction, and a considerable amount of
2 it after that.

3 They acquired a lot of help from the Navy, but
4 not in the way of money, but in-kind. They got free
5 steam alongside. They got free electricity. And the
6 dockyard apprentices built her seaboard. They did a lot
7 of scrounging, as I think only those of you who are
8 Navy know all about getting rabbits made, as we call
9 them in the British Navy, the Canadian Navy.

10 They found a gun at a Canadian legion
11 somewhere in Ontario and traded them something else for
12 it. But the gun shield was long gone, so the gun
13 shield is entirely new. The superstructure, the
14 majority of it was made out of wood. It's now steel,
15 exactly same size and the same configuration. But
16 through considerations of restoration, again, and
17 maintenance downstream, we decided to make her of
18 steel.

19 Oh, that is the Arcadia. This is the
20 builder's model of the Arcadia. We are very fortunate,
21 actually. The builder provided us with drawings, and I
22 am not sure how we acquired them, but I think we got a
23 series of builder's trials photographs and photographs
24 of the brand new ship. I think we got them from
25 Vancouver somewhere. We have a marvelous collection of

1 photographs of this vessel when she was brand new.

2 You can see there that small wooden house
3 completely different from the vessel that we have. But
4 everything else is virtually the same. It's amazing
5 how a vessel can last that length of time and provide
6 good service. I suppose it's a testimonial to her
7 original designers.

8 Oh, let's go back to that one. One of the
9 things that you really must do when you preserve is
10 paint everything. This thing flips over and sits on a
11 wooden block. It's got a really good coating of white
12 lead underneath it. I think this is something that we
13 always watch. Even things that don't show must be very
14 carefully preserved.

15 That is the mast, and there are more patches
16 in that than Jacob's coat of many colors. It really is
17 quite a good job, and looks very good. The contractor
18 came up with what we hope downstream will be a very
19 good idea. At that particular point, you can see the
20 small tube. That is a screw cap. That tube in the
21 middle of the block here penetrates into the heart of
22 the mast. We keep filling it with pentachlorophenol.
23 And we have another one -- oh, dear. Sorry again.
24 This is some of the repair work we did on the decks. I
25 had a slide of upper part of the mast. We also have

1 the same thing high on the mast. I think downstream it
2 will pay off.

3 This gives you an idea of what that mast was
4 like. We are fortunate because it doesn't have to
5 carry heavy loads. There are no yards up there, just
6 one small gaff. This is a testimonial to the
7 workmanship that epoxy and patching can do.

8 Oh, yes. Up there. See the little cup? Then
9 that just disappears inside the mast and ends up in the
10 heart. And you go up and check it once in a while and
11 put some more pentachlorophenol in. This was, as I
12 say, a result of a good contractor.

13 Here is another one I will leave you with,
14 another idea he came up with, which may be worthwhile
15 for steel, for recent steel ships. He suggested we
16 learn from the mothball fleet and we put nitrogen in
17 the tanks and all void spaces rather than go through
18 extra coatings. I think it is something that needs
19 examining.

20 These are the kinds of things -- this is the
21 foot of the breakwater, the problems that we all have.

22 From the point of view of authenticity, I
23 personally don't like this. This is not correct. You
24 should replace the whole plank. This is not giving
25 good replication of the way the deck was laid. But the

1 money.

2 Now, there is that breakwater again, and you
3 can see all the short planks. They are scarfed in and,
4 I believe, well done. We can only find out downstream.
5 But it's not authentic. I don't think there would be
6 one in five of those planks that would stop at that
7 particular point. That again is another example. You
8 saw earlier on that same area around the stern where
9 the waterway is now looking pristine. That is what the
10 Corvette looked like during restoration. All that is
11 new steel, but all that had a two-story deckhouse on it
12 very similar to the one on the Arcadia.

13 Again, in the midst of restoration. I am not
14 sure whether restoration is the correct word for that.
15 There is an interesting presentation of a vessel.
16 Alongside that is a stairway which you can climb and
17 get on board. This was the Navy's hydrofoil, the
18 Berdoah. They took it out of service about ten years
19 ago, and the museum in Quebec acquired her, and this is
20 the way they have chosen to present her. I think it
21 really is quite a good way.

22 This bulkhead here, this bulwark, is actually
23 the lower part of a house. This whole area was
24 entirely enclosed after the war to give more space for
25 scientists.

1 [Applause]

2 MODERATOR McGRATH: Thank you. I'd like to
3 ask Walter, if you would like to come up, we are
4 running about 15 minutes behind. But I know everybody
5 wants to ask questions and have discussion, so we are
6 going to take 15 minutes from our discussion period at
7 the end of the day and use it right now. So, if there
8 are any questions, Walter and David, if you would like
9 to come up here, we can try and accommodate -- in fact,
10 we can have 20 minutes, and then we will have a coffee
11 break, but it's going to put our schedule behind 15
12 minutes. So, if you would please identify yourself
13 with your questions.

14 I'd like to also make one statement. The
15 co-author for the Secretary's Standards for
16 Rehabilitation, Gary Hume, is here with us today. We
17 can, for all of you who are unfamiliar, the Secretary's
18 Standards for Rehabilitation is the document that David
19 Walker was referring to. That is not in your course
20 booklet, but we can get you all copies of that. I
21 didn't want to influence these proceedings and pass
22 that out, but now that it's been brought up, we can
23 provide that to you.

24 So, I will open the floor to questions. I
25 know David Brink in the background has a question.

1 MR. DAVID BRINK: Basically a comment. One,
2 going back to the discussion from Mr. Walker, I think
3 there is a basic, fundamental difference here between a
4 ship being alive and basically an artifact being dead.
5 And if you look at artifacts being ships that are no
6 longer in service, being museum pieces, and going in
7 and retaining the original fabric, that is fine. But I
8 think that the land people have to understand that the
9 process of keeping the vessel alive and in service is
10 one hopefully of not neglect but one of constant
11 service.

12 MR. RANDY BIALLAS: I would just respond to
13 that. I found the dentistry techniques that David used
14 on the mast and the decking is something very similar
15 to what we would do. And although we felt
16 uncomfortable with the decking solution, I can see why
17 we might, from a serviceability or maintenance
18 standpoint, you know, I still think that might be a
19 compromise solution, both from his viewpoint and our
20 viewpoint, that maybe we both can live with.

21 MR. DAVID WALKER: I don't think we have a
22 choice, actually. It just seems to me scary to think
23 that perhaps 30 years down the line, we are not going
24 to have a plank on the deck -- nor are other ships that
25 I've seen.

1 MR. RANDY BIALLAS: I understand that. That
2 is a comparable problem we would have with roofing, for
3 instance. It is obvious that roofing is a material
4 that we all know has to be replaced, and if the roofing
5 is slate, it might last 50 years. And if it doesn't,
6 it won't be because the slate failed, it will be that
7 the fasteners will fail first. We all realize that.
8 And decking would be a comparable thing.

9 But it seems to me that there would be some
10 materials or systems in a vessel that could be
11 preserved comparable, say, what a building structure
12 would be over a very long period of time without total
13 replacement.

14 MR. WALTER RYBKA: No doubt. There are
15 certain portions of the structure that might survive
16 for an incredibly long time. And even in the area of
17 decking, of course, if you have defect in a plank, I
18 don't think it's always warranted to tear the entire
19 plank out. You don't want to redo that much caulking
20 and loosen up some caulking around it.

21 If I had a damage or a local damage in Elissa,
22 we wouldn't tear out a 26-foot plank to replace two
23 feet of it. But it is just that when you get far
24 enough down the road, eventually you are going to have
25 so many little patches that then you have to look at it

1 and say, "This doesn't look very authentic anyway. It
2 looks like a jigsaw puzzle. We are having more
3 problems with caulking, we are having more leaks
4 because it's looser." And so really it's a judgment
5 call as to when it's more efficient to replace it.
6 That's why it's not hard and fast, and that's why I
7 tend to just go by the attitude of what's the best way
8 of taking care of the ship. Sometimes it's
9 replacement, sometimes it's patch.

10 MR. RANDY BIALLAS: I think we are talking the
11 same language, really. The only thing that scares me
12 is, you take a museum ship that, by sort of definition,
13 you're not going to be using the same way as when it's
14 an active vessel, and you try to make it into an active
15 vessel and you justify massive replacement, that it's
16 going to be an active vessel, the ship you worked on,
17 the Galveston, you're using as an active vessel, so
18 obviously a lot more fabric had to be replaced than if
19 it had just been sitting at the dock.

20 MODERATOR McGRATH: Commander Sudsholtzer.

21 MR. HERMAN SUDSHOLTZER: We are talking a
22 number of things here, and I sure don't like to use the
23 term land-base, but a ship is a flexible structure.
24 It's in a dynamic environment -- water. You people are
25 sitting here and halfway through the presentation,

1 everybody starts going like this all the time
2 (indicating).

3 A ship is a dynamic structure, and it
4 fluctuates, it twists, it's subject to winds that cause
5 the whole structure to move and change the forces on
6 the structure -- that a house is not subjected to. It
7 sits on a solid foundation, buried in the ground. And
8 unless you're -- right where we are -- on the fault,
9 then it doesn't shake a whole lot. You can get away
10 with things in a house -- replacing a shingle -- you
11 can't get away with on a wooden ship. You can get away
12 with replacing a two-inch square hole and welding it in
13 a steel ship. You cannot get away with that on a
14 wooden ship, because you have got to get a dynamic,
15 working flexible structure. You have got to replace
16 that whole 40 feet of plank. Otherwise you have lost
17 the structural strength of that structure. It's not
18 the same as just a piece of wood that you walk in a
19 living room, which you call the floor. That deck is an
20 integral part of the structure of the ship -- which
21 this holds together and allows it to work. You can't
22 put little pieces -- you've got to do the whole thing.

23 The comment made earlier about the exact
24 method of building an old ship over in England, and I
25 missed the name --

1 MR. DAVID WALKER: The Shamrock.

2 MR. HERMAN SUDSHOLTZER: The Shamrock. All
3 right. She is marginally -- one of those ships that's
4 in between a little bit too big to put in a house and a
5 little bit too small to be called large. You get any
6 bigger than Shamrock, you're talking large ship. And
7 to do that type of thing to a large ship becomes almost
8 prohibitive. You can get away with it in a ship of
9 Shamrock's size and smaller.

10 MR. DAVID WALKER: They're not really getting
11 away with it. They're spending a lot of time and --

12 MR. HERMAN SUDSHOLTZER: You can get away with
13 it because you've got "X" number of dollars, but a ship
14 larger than Shamrock, I mean, you're spending so
15 much --

16 MR. DAVID WALKER: Your graph would skyrocket.

17 MODERATOR McGRATH: We have Strafford Morss.

18 MR. STRAFFORD MORSS: In both Elissa and
19 Arcadia, at least the pictures appeared that you were
20 using lead paints, red lead as preservative. Is that
21 true or not? Did you have problems with it?

22 MR. WALTER RYBKA: No. It varies. On Elissa,
23 we used a modern red lead, but it was an alkyd resin
24 base. We used all International paints, and that was
25 used on the interior only.

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23 we used a modern red lead, but it was an alkyd resin
24 base. We used all International paints, and that was
25 used on the interior only.

1 The exterior, it was really just red lead
2 coloring, what they call the red lead epoxy. That went
3 over a barrier gray epoxy. It was just to give us
4 color differentiation between coats. But the base
5 metal protection was inorganic zinc. On the exterior
6 shell above the waterline, all weather surfaces, it was
7 an inorganic zinc followed by epoxy, followed by vinyl.

8 The interior, because of some rust sandwiches
9 behind frames, the tight spaces, the holidays you get
10 around rivet heads, even though we did our best to get
11 a white metal blast, we knew we weren't getting any
12 real white metal blast. So, the advice was to not use
13 the high-tech coatings because you wouldn't achieve
14 quite the surface prep, and also for future touch-up.
15 We had problems with doing maintenance work while we
16 had visitors on board, because we're open most of the
17 time. We have problems of not wanting to use high-tech
18 paints that would require separate oxygen supply for
19 the operator. So we stayed with oil-based paints on
20 the interior and went with the high-tech paints on the
21 exterior.

22 MR. DAVID WALKER: I really don't have a lot
23 of information on that. I am sorry.

24 MODERATOR McGRATH: John Reusen.

25 MR. JOHN REUSEN: I have a specific question.

1 When you were doing the steel work between the welding
2 and the riveting, did you have to submit to either
3 American Bureau of Shipping or Coast Guard inspections?
4 Did you have to have certified welders?

5 MR. WALTER RYBKA: Neither in the case of
6 Elissa -- when we first started the restoration, we
7 were under classification-reclassification survey with
8 Lloyds Register. Generally, ABS will accept whatever
9 Lloyds passes on and vice versa. We were in Piraeus.
10 The ship had been classed with Lloyds before, and we
11 started working towards that. When we got back to the
12 United States, we found that since we weren't going to
13 go all the way to reclassing the vessel as a 500-ton
14 freighter, which really only would have been doable
15 under Liberian or Panamanian flag, after we got back
16 here and had accepted Department of the Interior money,
17 we felt we really had an obligation to be an American
18 flag vessel. So we asked Lloyds for a lesser
19 classification, and they really didn't think there was
20 anything applicable, so we are just carried as an
21 honorary class.

22 There is no Coast Guard category for an
23 operational vessel we could fit into except just an
24 uninspected vessel. We sail as a yacht, so therefore
25 we didn't have to be inspected or have the work passed.

1 MR. JOHN REUSEN: Do you need an excursion
2 permit go out?

3 MR. WALTER RYBKA: No. We have a courtesy
4 inspection. We tell them when we want to go out. They
5 come down, count fire extinguishers, life jackets, have
6 a look around the ship, and we invite them to come
7 sailing with us.

8 But we only carry, you know, guests and
9 volunteer crew.

10 MODERATOR McGRATH: We are going have a
11 session on sailing historic craft, and so we will get
12 into that a little more. We had one question here.
13 Lynn, and then I will get back to you, Peter.

14 MS. LYNN HICKERSON: I think that the question
15 a little while ago, what Walter was saying earlier
16 about shelters, that interpretation can answer some of
17 these questions, I think. On the ship, that if these
18 different techniques are simply interpreted to the
19 public, we can get beyond the controversy.

20 MODERATOR McGRATH: Peter Neill.

21 MR. PETER NEILL: I think David's point, which
22 you brought out by looking at the standards and
23 recommendations and the kinds of attempts to translate
24 some of the Upland stuff to the maritime stuff is
25 really an excellent point. It will allow us to go

1 forward very, very quickly.

2 The reason I say that is that -- and it amuses
3 me in some ways to hear you guys setting up that kind
4 of situation, especially if you read the standards.
5 The one that I think is the most important one -- there
6 are two I'd like to quote. One is No. 3, the first
7 sentence, which is, "All buildings, structures, and
8 sites shall be recognized as products of their own
9 time," which is, I think, a philosophical position that
10 is really inherent in maritime preservation, and there
11 is no difference. And No. 4, which is even better:
12 "Changes which may have taken place in the course of
13 time or evidence of a history and development of a
14 building, structure, or site in its environment, these
15 changes may have acquired significance in their own
16 right, and this significance shall be recognized and
17 respected."

18 Now that phrase right there, seems to me,
19 addresses this image of a ship as a more or less
20 dynamic artifact, and within the spirit of the
21 Secretary's standards, as written, seems to me could be
22 very comfortable.

23 MODERATOR McGRATH: Steve Hyman.

24 MR. STEVE HYMAN: This discussion between
25 restoring houses and restoring ships and the academic

1 arguments are pretty interesting to me. But one of the
2 things I've run into on almost a daily basis is really
3 having some sort of guidelines in the field. How do I
4 determine when that yard is no longer safe for service?
5 Or how do I determine when it has to be replaced?

6 MR. DAVID WALKER: We call in a surveyor.

7 [Laughter]

8 MR. STEVE HYMAN: Does that assuage my guilt
9 by paying someone else to make a judgment call? What I
10 am looking at, David, is pinning the blame on somebody
11 else if it breaks after I can't decide, but helping
12 people in the field who are actually doing the work.
13 When do we make that judgment?

14 I think there was agreement that we try to
15 save historic fabric whenever we can, but the problems
16 we run into, there's a thin line between: When do we
17 save historic fabric, when do we replace?

18 MR. DAVID WALKER: I really think you have a
19 good point. It's something we have discussed in the
20 museum. I am a technician. I am a naval architect who
21 has gone into surveying, and I know structures and I
22 know physical things. I know very little about
23 history. I have people in the museum who know a lot
24 about history and don't know very much about structural
25 engineering. I think the two have to blend together.

1 So, when you have a problem that you can't determine
2 and you feel unsure about the answer, then you send
3 your surveyor up the mast, he looks at that, and if he
4 says, "No, it's not safe," you've got an answer you
5 can't even debate. If you want to bring that yard down
6 and put it along the deck as an illustration of the
7 original yard, it can be stabilized on the deck. But I
8 think you don't have a choice. You are going to have
9 to put up a new yard.

10 MODERATOR McGRATH: Randy Biallas.

11 MR. DAVID WALKER: Does that address your
12 problem?

13 MR. STEVEN HYMAN: Not really. Because I am
14 often in the position of being called in to be the
15 surveyor. All I can do then is turn to other surveyors
16 to try and develop some sort of consensus.

17 MR. DAVID WALKER: Can we chat about it later?

18 MODERATOR McGRATH: Randy Biallas.

19 MR. RANDY BIALLAS: Just one comment on the
20 Secretary's standards so that we have a context. I
21 don't think many of you are familiar with the
22 Secretary's standards. They were developed in order to
23 judge whether certain federal money given as grants to
24 private organizations was being appropriately spent.
25 And there is more than the Secretary's standards for

1 rehabilitation. The general, broad term is the
2 Secretary's standards for historic preservation
3 projects. There are different treatment levels
4 recognized there. One treatment is preservation. One
5 treatment is rehabilitation. One treatment is
6 restoration. And another treatment is reconstruction.

7 You're just looking at one of those treatments
8 in this gray book you have had your hand on. There are
9 standards for each of those treatments. The first
10 eight standards are the same for each of the
11 treatments, and we have had those on the first page we
12 were looking at. Then there are treatments, other
13 standards for the other treatments.

14 I think, really, if you were going to review
15 that, looking at that, you would have to look at the
16 whole thing. Actually, in your blue book is the
17 Secretary's standards for all those treatments in the
18 back. These standards were really developed for work
19 outside the National Park Service. What we have done
20 inside the National Park Service, we have generalized
21 the building, the structure. Every time, where you
22 were reading "historic building," we have said
23 "historic structure." We have massaged certain words
24 around in the standards already, and that is in here,
25 too.

1 For instance, how do you apply standards for a
2 building for fortification -- which is quite a
3 different kind of animal -- or a bridge or a dam or all
4 those kind of things, all of which we manage in the
5 Park Service?

6 So, what you're doing as far as massaging
7 words has already been done in relation to the National
8 Park system. You could very well do that additionally
9 as far as vessels are concerned.

10 MODERATOR McGRATH: We have time for one more
11 question. Don Birkholz.

12 MR. DON BIRKHOLZ: I think an important point
13 here is that it's not good to be dogmatic about any of
14 these approaches. You have to take each individual
15 project or task on its own merits, looking at
16 considering historic fabric, long-term maintenance
17 expenses, replacement expenses, and make a judgment
18 based on all those factors.

19 If you try to go strictly to any guidelines,
20 pretty soon you run into a case that doesn't apply and
21 you end up doing it wrong. I look at a job now and
22 then and I know it's done right. I can't explain why
23 or what guidelines were used, but I know it fits, it's
24 going to last, it respects historic fabric and
25 authenticity and it's right.

1 You can't create guidelines so that you stop
2 thinking about each individual task. It's inevitable
3 that you have to do that.

4 MODERATOR McGRATH: Thank you very much.

5 [Brief recess until the panel discussion
6 aboard the Balclutha]

7 MODERATOR McGRATH: We have a few more seats
8 up front, if anybody would like to have seat. We have
9 a contract with our court reporter, so we are going to
10 to have to cut this off at 5:45. So, the sooner
11 everybody gets seated, the sooner we can begin.

12 Walter, what we would like to do is open up
13 the floor to all the participants. I will attempt to
14 moderate once again. I am not sure that I am going to
15 recognize everyone, so, please, when you ask a
16 question -- we have some more seats here -- it will be
17 a lot easier if people will sit down. It will make my
18 job easier. I can't see everybody. We do have some
19 seats. The idea here is to just have an open
20 discussion about all the issues today. So the floor is
21 now open. Any questions?

22 Yes. Strafford Morss.

23 MR. STRAFFORD MORSS: I know that we have been
24 involved in a very academic and high-level discussion
25 today, but I would be very interested to hear from the

1 various speakers, in the projects that you specifically
2 mention, such as Elissa, Arcadia, Dr. Brouwer, one that
3 you mentioned, the Wavertree, whatever, what these
4 ships cost to put back into condition. I think that it
5 is a very mundane thing, but it's really the thing that
6 allows us all to keep going or not to go.

7 MR. WALTER RYBKA: I guess I could answer the
8 first part of that. The Elissa project perhaps has its
9 costs documented to date. We look at our total project
10 cost as being somewhere around \$4.3 million now. Now,
11 that is a composite. That is a project cost. That is
12 the cost of raising the money. That's improvements to
13 the berth, the lease on the berth, building part of a
14 dock, you know, towing the ship back from Greece.

15 On the other hand, if you did all the work in
16 the states, I think that cost would be quite a bit
17 higher, because we accomplished a tremendous amount of
18 shell renewal in Greece. Well, shipyards charge by the
19 pound, usually, and we did 50 tons of work at an
20 average price of \$5 an hour in Greece. So, if you
21 translated that all into American dollars, it's hard to
22 say exactly what the cost would have been, because if
23 the ship would have been done over here, a lot of
24 things would have been done differently. But at any
25 rate, from the inception of the project, where the ship

1 was bought in 1974 until present time, we spent about
2 \$4.3 million on it.

3 MODERATOR McGRATH: Dr. Brouwer.

4 MR. NORMAN BROUWER: Norman Brouwer. The
5 Wavertree project is still underway. We had major jobs
6 to do, like the majority of the rigging still has to be
7 done. We know we have a lot of hull work to do. The
8 ship needs to be dry docked. The hull needs to be
9 thoroughly surveyed. And we are probably looking at a
10 pretty good figure and cost there, just dealing with
11 the hull condition.

12 We have probably spent around a million and a
13 half so far, including everything -- purchasing the
14 vessel, towing it back from Argentina, and the
15 restoration, and we are probably looking at somewhere
16 from four and a half to six million more before she is
17 fully completed.

18 FROM THE FLOOR: How much?

19 [Applause].

20 MR. PETER NEILL: I think it is sort of
21 important that we not be afraid of the figures. We
22 have talked about that a lot among ourselves, and there
23 has been a tendency on our part to two things: One, to
24 hide the truth from ourselves and from our funders,
25 and, secondly, to have to deal with the mindset that

1 evolves out of that, which can be frequently
2 self-defeating.

3 When you take the 11 years that you prorate
4 the cost of Elissa, let's say, over 11 years, the
5 number looks different. \$400,000 a year to take
6 something from a hulk to a work of art of that scale,
7 compare that to a building, for example, and you see
8 that it really isn't that intimidating a figure.

9 MR. KARL KORTUM: It costs \$40,000 for this
10 ship.

11 FROM THE FLOOR: What year was that?

12 MR. KARL KORTUM: 1954, '55. We did have an
13 extremely good break, as I mentioned this morning. One
14 day the phone rang and the chap from the labor union
15 said: We read about the right ship you bought, that
16 old ship, that old wreck in the paper, and can the
17 labor movement help in any way. So my response was
18 pretty positive. And they did help, consistently every
19 Saturday for a year, turning out anywhere from 20 to 30
20 skilled craftsmen. As I mentioned this morning, they
21 loved it, and they hated to see to see the project
22 finish a year later.

23 MR. WALTER RYBKA: The biggest difference
24 there, though, is that you still had most of the ship.
25 You had rig, you had spars, you didn't have major hull

1 MODERATOR McGRATH: Marcy Hooper.

2 MS. MARCY HOOPER: I am Marcy Hooper with the
3 O'Brien. When we got the O'Brien, which you'll be on
4 tomorrow, she was in very good condition. We probably
5 got her as peachy keen as anybody ever got a ship.

6 We put her in the shipyard. We ran \$480,000
7 above all the funding we had. Nobody ever thought it
8 would go that high, but it did. In the last five
9 years, we have paid off all but about \$100 of it, so
10 they love us. And we are going back in the shipyard in
11 two weeks, or a week from next Saturday, and we have
12 got a free dry docking. But we don't have free labor.
13 And you never know when these things are going to come
14 up. We've got free dry docking because someone on our
15 board is working for the company that has a hot new dry
16 dock. I know they are advertising, they're saying,
17 "Excuse me, but we dry-dock the famous liberty ship."
18 So, they're saving us hundreds of thousands. And we
19 were expecting another four or five hundred that we
20 didn't have. So, every once in a while, something
21 comes your way.

22 MR. PETER NEILL: They should pay you for dry
23 docking. You shouldn't pay them.

24 MR. WALTER RYBKA: Well, dry docking, and up
25 and down on dry docking and lay days is typically only

1 two or three thousand out of a \$50,000 job. So, when
2 somebody says -- that might have been the work done or
3 lay days over an extended period. But very often when
4 somebody gives you a free dry docking but will charge
5 for the work, it's great that they're doing that,
6 because it is a discount or it is a help, or every
7 little bit helps. But typically, in my experience,
8 when you put a vessel into dry dock and it needs a
9 bunch of work and all that came free was the dry dock,
10 that represented anywhere from two to five percent off
11 the cost of the job. So, thank you very much, and we
12 will take it, but it's still major money.

13 FROM THE FLOOR: The O'Brien has raised most
14 material required for that work in donations as well.
15 Again, as you know well, Walter, that is another drop
16 in the bucket. But in the case of the paint alone, we
17 are looking at a donation of over \$50,000.

18 MODERATOR McGRATH: All right. Karl.

19 MR. KARL KORTUM: Speaking of figures, the
20 figures have been concerned with outgo. I mentioned
21 this morning how we had taken the trouble to turn the
22 Balclutha into a floating museum with three decks of
23 exhibits and how well she was received by the city and
24 its visitors. She is approaching \$6 million that she
25 has made from admissions.

1 MODERATOR McGRATH: We had a question from
2 Peter Steele from Charlestown Navy yard.

3 MR. PETER STEELE: I just wanted to give a
4 figure on the rehabilitation of the Cassin Young, a
5 World War II destroyer. It was about \$500,000.

6 MODERATOR McGRATH: All right. I'd like to
7 interject one thing. I think we all recognize how
8 expensive any maritime work is. I'd like to perhaps
9 try and divert your attention again to some of the
10 subjects we have covered today in terms of standards.

11 I'd like to ask a question of Peter Neill, if
12 I could. Do we have a national cultural policy on
13 maritime resources. Where do we go next?

14 MR. PETER NEILL: Well, no, we don't have a
15 national cultural policy. I think that is quite clear
16 -- in the sense that a national cultural policy
17 represents a consensus agreed upon by all the various
18 people with a direct and vital interest.

19 However, I don't think it's that far away.
20 And what's interesting to me is that the policy has
21 sort of evolved in bits and pieces in spite of our
22 inability to define it. So that you have in the work
23 of the people represented here -- and many, many
24 others -- wonderful precedents that, taken together,
25 could easily be converted into a policy, and beyond.

1 I think that it would be a very simple
2 proposition for us to come up with a definition, with a
3 set of guidelines, and even to begin to work on the
4 institutionalization of standards, given the caveat
5 that those would evolve over a period of time as our
6 experience broadens. But I think we could do that if
7 we concentrated, sat down, brought the right people
8 together, locked them in a room and told them that you
9 couldn't come out until you agreed.

10 MR. DAVID BRINK: I'd just like to add that
11 the Maritime Trust Task Force, which has worked for
12 about three and a half years, which has objectives --
13 not yet priorities, but objectives in your booklets,
14 basically I think has come the closest to developing a
15 mandate for a consensus of maritime preservation. And
16 it was based on a point that was touched on earlier in
17 our discussions today -- that is, there must be balance
18 in program. We have the lighthouse people there, the
19 underwater people, the big ship people, the small boat
20 people. There must be a balance and a constituency
21 there, a balanced interest and a balanced program -- if
22 we are going to get a consensus and we are going to get
23 everyone working on it.

24 At the last conference in Baltimore, basically
25 unanimously all three tenets of the program --

1 political, economic, education preservation, and the
2 standards' objectives, all of which are in the
3 booklets, were agreed upon unanimously after some
4 lively discussion. They were approved by the Trust
5 board and hopefully will be further discussed in terms
6 of their priorities at the conference in Seattle next
7 month.

8 So I think that, largely due to Peter and the
9 task force and a lot of people's good work, we are
10 getting much closer to that. I would encourage
11 everyone here to participate in that process that does
12 exist, to come to Seattle and bring with you the work
13 that has been done here and the work that you have done
14 in other constituencies and start laying that in on top
15 of the work that's already been done.

16 MODERATOR McGRATH: All right. Peter.

17 MR. PETER NEILL: I just want to add one
18 thing. I think that also this group, because of the
19 way we have assembled under the context we have
20 assembled, we are interested in only one-third of that
21 agenda. But it doesn't make sense to look at maritime
22 preservation only in terms of standards and guidelines
23 and techniques and the technology or ship preservation.
24 As I tried to imply this morning, it's much larger than
25 that, and I think the beauty of the task force report,

1 such as it is, was that it did talk about the
2 educational aspects of maritime preservation, the
3 skills preservation aspects, and also talk about
4 waterfront development. These ships are sitting in the
5 middle of an interesting social phenomenon out here, a
6 redevelopment of San Francisco's waterfront, with a lot
7 of inherent conflict and opportunity/possibility that,
8 quite frankly, beyond the admissions that are
9 generated, haphazardly, in fact, probably hasn't been
10 taken full advantage of.

11 I know in my own case in South Street in New
12 York, it's even more interesting than that, where the
13 museum is actually a financial partner in the
14 development of the real estate, and the outcome of that
15 is yet to be seen. A lot of people are being very
16 negative about it, and there is reason to be negative
17 about it in the sense that the museum seems to have
18 suffered, but we are not finished yet. And it may well
19 be that the precedents that are being set at South
20 Street, where the museum and the nonprofit is becoming
21 a day by day partner in the redevelopment of an entire
22 district, with the financial supports and involvements
23 that come along that can augment the budgetary
24 requirements of the museum. The jury is still out. We
25 can't see ourselves as narrowly as we have in the past.

1 And as as soon as we come out, enter into the real
2 world, become real partners, provocateurs, learn what
3 it means to be a developer, just as we learned what it
4 means to be a ship restoration person, I think we will
5 be better off for it. I think that the support that we
6 will get, the political support and the financial
7 support will be much, much greater.

8 Right now, we are viewed as parochial,
9 narrow-minded eccentrics.

10 MR. JAMES DELGADO: In discussing development,
11 again, and talking in terms of being developers and
12 moving into the real world, I think we do need to get
13 in and to hit upon the tax certification credit.

14 If you all do agree that that law is
15 beneficial to historic preservation, as it certainly
16 does appear to be on dry land, then I think the time
17 has come to stop the discrimination against vessels in
18 the water, particularly if they are in the type of
19 setting that Peter is talking about, where they are a
20 viable entity in a waterfront district -- perhaps
21 they're just being restored. If the buildings on the
22 shore, the chandlery shops, the warehouses, the
23 offices -- if they are to get tax certification credit
24 and get a 25 percent write-off, then why not the
25 historic vessels which add a flavor and a character to

1 renewals to do at that time. So, a lot of these
2 projects, they vary so much with the scope of the work.
3 You know, are you repairing a structure or are you
4 doing a renovation and cleaning up? You may be
5 renewing standing rigging but not renewing spars. Or
6 are you completely building the structure?

7 MR. HERMAN SUDHOLZ: At the other end of the
8 scale, the Constitution spent \$12.7 million in a
9 cosmetic repair period in '73 and '75, annual budget of
10 \$1.3 million total now on a sustaining level. Looking
11 at close to 50 million for major rework coming up in
12 early 2000.

13 MR. DAVID WALKER: Going back to the Arcadia
14 now, I think I will have to call for a little help
15 here, but we have had the ship three and a half years.
16 She was docked and sandblasted, and a tremendous amount
17 of work was done on her initially, but you must
18 remember that our ship was in extremely good condition
19 when we got her. I think --

20 FROM THE FLOOR: \$300,000 to date, and current
21 estimates are another \$200,000.

22 MR. DAVID WALKER: Did everybody hear that?
23 About \$300,000 to date, over that period. And the
24 initial, the big lump was spent at the beginning for
25 the docking, bottom preparation and so on.

1 that district and which certainly are an integral part
2 of it?

3 If you agree with that, I think it behooves
4 you to contact your Congressman, and perhaps even to
5 lobby further than Washington, D.C., to see that the
6 law does continue in effect, because it is threatened.
7 And if you also agree that these things need to be
8 done, then perhaps look for a change in that law,
9 because I think you need economic stimulus to continue
10 maritime preservation, and the tax credits would
11 certainly help.

12 MR. PETER NEILL: As the National Park Service
13 now or --

14 MR. JAMES DELGADO: No. Speaking as an
15 individual. That's why I said, "If you agree."

16 MODERATOR McGRATH: Peter Steele.

17 MR. PETER STEELE: I just wanted to ask Peter
18 Neill whether, in suggesting the business of liaison
19 with development, private development, are you
20 suggesting that that should be a part of the standards
21 that come out of this conference?

22 MR. PETER NEILL: No. Because I think we
23 haven't attempted to -- we haven't set ourselves that
24 course, and I don't think we really ought to. I think
25 it would be too diversionary. But I do think that

1 everybody involved in one of these projects ought to
2 think about alternative sources of support. I mean, we
3 bandy the large numbers about, and Karl mentioned \$6
4 million of admissions. Well, in fact, a healthy amount
5 of the strategy for the new South Street Museum will be
6 based on admissions, a translation of trying to
7 capitalize on the 15 million visitors that will come to
8 that area annually, to try to translate a percentage --
9 two to five percent of those -- translated into an
10 admission in the museum will create not only an
11 operating budget that will allow us to keep the doors
12 open, but also to be able to budget, on an annual
13 basis, maintenance and some capital improvements in the
14 ships.

15 Then, you see, that frees your philanthropy to
16 the other kinds of projects that become special capital
17 improvements that come along every now and then. You
18 don't have them on an annual basis. And it's that kind
19 of a thing that you need to have -- commercial
20 sponsorship. I mean, let's face it, if there is no
21 federal money and if there is no state money and if
22 you're not interested in admissions and you don't have
23 a subsidy from either the city, the feds, or a
24 philanthropist, you don't have any money. So the whole
25 thing is kind of a joke, isn't it -- unless you were

1 sitting there and come out of your cocoon and say, "All
2 right. Not only am I going to restore the vessel, but
3 I am going to restore the vessel with a purpose and in
4 a context that allows the vessel to sustain itself over
5 a period of time," you're kidding yourself.

6 MODERATOR McGRATH: Question from Tom Wicks,
7 one of our deckhands.

8 MR. TOM WICKS: I was about to say, "here,
9 here," Peter, when you seemed to advocate that the
10 environment in which the historic vessels would be
11 preserved would be an important one.

12 However, I find that the various waterfront
13 districts and areas around the world, around the
14 nation, are diminishing due to the economic clime.

15 I think that along with the vessels being of
16 importance, that so should be the -- and of course we
17 have heard that term, that buzzword as you say, "the
18 skills preserve." I mean, like the whole morning was
19 taken up with considering historic fabric. In 50
20 years, it will not be an issue, will it? Everything
21 will have deteriorated in any sense. And it could be
22 thought that dutchman that kissed the hull of the
23 vessel will have in some sense imparted the spirit of
24 the entire concept such that it can be carried on in a
25 very important way to subsequent generations. We

1 should support the people and the environment in which
2 ships are found, I think.

3 Could you comment.

4 MR. PETER NEILL: Absolutely. I couldn't
5 agree with you more. But the fact is that the reason
6 why those things have been subverted is because --

7 MR. TOM WICKS: Money?

8 MR. PETER NEILL: No. Well, it is money,
9 that's true, but it's even worse than that, it's
10 because we, as the people who believe in it, have
11 abrogated our responsibility to become advocates for
12 those things. So, in my own case, where you have
13 Fulton Fish Market sitting side by side with the
14 maritime museum, for the maritime museum and the Fulton
15 Fish Market not to be together on all issues is a
16 tragedy. And in fact, for the museum not to recognize
17 that the fish market, as a vital expression of
18 well-being in the tradition that we celebrate, for us
19 to deny that is reprehensible. So, I think it's
20 because we haven't done our job well enough. It's not
21 the developer's fault. It's our fault. We are the
22 ones that should be going out there and taking the
23 message -- if we believe in the message so strongly, we
24 ought to be able to convince other people. If that
25 means using all the sophisticated techniques of

1 marketing and persuasion, then so be it. Let's do it.

2 MODERATOR McGRATH: I would like to, before
3 Lynn -- Lynn Hickerson of the National Trust, go ahead.

4 MS. LYNN HICKERSON: Yes, in fact, I think we
5 should stop thinking of ourselves as poor and start
6 thinking of ourselves as rich. I heard you say under
7 your breath that we should get the dry dock company to
8 pay us, don't pay them. The Jeremiah O'Brien needs a
9 dry dock, and maybe that is the case.

10 McDonald's, back to the San Mateo this
11 morning, their highest earning McDonald's restaurant is
12 in St. Louis -- I have never been there, but maybe some
13 of you have seen it -- paddlewheeler steamboat. They
14 have noticed that. They have noticed that all the
15 numbers are bigger at St. Louis.

16 So, therefore, I mean, we are right these
17 days. And anybody knows that control comes with
18 ownership. And those who own these vessels have that
19 control, so there it is.

20 MR. JAMES DELGADO: Do we define an
21 appropriate commercial use for vessels, then? When do
22 we develop the standard, then, that says that a fast
23 food restaurant may not be appropriate for a certain
24 type of vessel; a timeshare condominium in another may
25 be?

1 We had a case here in San Francisco with the
2 riverboat Delta King not too long ago where a group of
3 of private developers from British Columbia came in,
4 said, "Here's the vessel. We wish to restore it. We
5 wish to berth it at the National Maritime Museum. And
6 in return for our restoring the vessel, at least
7 portions of the vessel, and opening up small areas to
8 public use and access, we require the use of the vessel
9 commercially as a timeshare condominium."

10 Now, that engendered a tremendous public
11 response. A great deal of it was negative. The
12 process dragged, and, ultimately, Delta King was not
13 redeveloped on the San Francisco waterfront, at Aquatic
14 Park, and as part of, in a sense, an auxiliary member
15 of our fleet with timeshare condominiums. She is
16 currently being refitted up in Sacramento for a variety
17 of commercial uses.

18 I guess the idea here is that a number of
19 people reacted adversely to what they felt was an
20 inappropriate commercial use of the vessel and perhaps
21 its inappropriate siting in a public agency or public
22 use area.

23 Without debating the merits of that issue, I
24 think we do need to look strongly at what is
25 appropriate and how we work, perhaps, with the private

1 sector to fit our needs with commercial development in
2 a suitable manner.

3 MS. LYNN HICKERSON: I am saying that we have
4 the opportunity because we have the ownership.

5 MR. PETER NEILL: Let me give you another
6 example, which fits to the skills, the jobs, the
7 continuity of tradition. South Street just introduced
8 a sidewheeler, the Andrew Fletcher. She is a new-built
9 boat. She was designed under the supervision of a
10 maritime historian, built to Coast Guard standards, and
11 runs an excursion for us to look at New York harbor
12 history.

13 She is making somewhere between 10 and 16,
14 \$17,000 a day, and she is a great success. Not only is
15 she providing funds to the general operating budget of
16 the museum, but she has reintroduced the sidewheeler to
17 New York harbor in a fashion that is appropriate.

18 And thirdly, it's a joint venture partnership
19 with a capitalist. And that capitalist, now persuaded
20 that this project is so worthwhile, is now looking for
21 a historic vessel which he will take, and he will
22 either renew it, rehabilitate the historic vessel, or
23 replicate the vessel on her lines exactly to put back
24 into that service.

25 That has all kinds of interesting

1 ramifications. One, she is a new vessel, so the
2 tradition continues. Two, she has created jobs.
3 Three, she is supporting a maritime museum. Four, she
4 is taking people out and giving them a very active
5 on-the-water experience.

6 And so you suddenly have something that
7 transcends the traditional confines of the little
8 sleepy maritime museum over in the corner. I think
9 that is the kind of entrepreneurial attitude that I
10 think has to go hand in hand with the technological
11 expertise that we have been talking about today.

12 MODERATOR McGRATH: I would like to ask a
13 question. We have discussed this morning and in the
14 first sessions the planning work. Here, Peter has
15 described a great idea. I think we have all seen good
16 ideas become bad plans. To get back to the idea of a
17 standard or a guideline, how do we judge a good plan?
18 What qualities, what characteristics, what components?
19 We heard this morning discussions of ship's lines,
20 ship's drawings. We saw some hams work. We will see a
21 little more of that tonight. What are the components
22 that make a good plan that we as a community can share
23 so that a good idea doesn't become a maritime disaster?

24 Walter, could you comment on that?

25 MR. WALTER RYBKA: Yes. I think in planning

1 work, the place to start is where you want to end up.
2 It's to identify where you want to be, what's the end
3 use. What time period are you looking at? Is this
4 plan going to be valid for five years? Is it ten
5 years? Does it go 20 years into the future? Is it
6 supposed to be something that as near as you can tell
7 is indefinitely sustainable?

8 It's to first identify the time span you're
9 looking at and then to figure out, at the end of this
10 project for this construction phase or whatever, where
11 do we want to end up? Do we want to end up with
12 something that is self-sustaining, something that has
13 income-producing potential? Is this part of a larger
14 plan? How many other pieces go around it? It's to put
15 it in context. Then you start backing up into the
16 details.

17 Before you answer detail questions, you find
18 out all the information you need to know to get the
19 details. And usually that starts with a good survey of
20 the vessel. Most restorations that fail in one way or
21 the other are based on starting with inadequate
22 information. The Elissa restoration is a prime example
23 of that. The Elissa restoration was conceived around a
24 plan of getting the ship reclassified as a freighter,
25 motoring her back from Greece, and completing the

1 restoration in the states. If she was classed as a
2 freighter, she would carry a freight, that would pay
3 for her trip back, et cetera, et cetera -- based on a
4 completely inadequate hull survey.

5 So, it was a plan, but it was based on
6 inadequate information. I have seen any number of
7 other projects where a given piece of restoration work
8 was done, and maybe it was not done badly, but the real
9 need was over here, where the bottom of the ship was
10 falling out of it or something like that hadn't been
11 addressed.

12 So, I have seen other projects where the
13 project was well done but there wasn't a plan for what
14 to do after the it was finished. And that, I will talk
15 about tomorrow in reproductions, because that is a real
16 typical problem. So, I think the first place you start
17 is: Where do you want to end up? And then the next
18 place you start is: What information do you really
19 need to have? And then, when you put those two
20 together, that is the planning process in the middle,
21 because that's where you figure out what you have to
22 do.

23 MODERATOR McGRATH: I'd like to make one
24 comment here. First of all, in the Park Service, and
25 it's beyond the Park Service in historic preservation

1 work in general, there is a document we call the
2 Historic Structure Report. That constitutes the plan
3 prior to beginning any restoration, rehabilitation,
4 renovation work on any historic structure. This is a
5 term that most architects are familiar with outside the
6 Park Service. I would, here again, pose the question.
7 I might ask you, Mr. Brink, is the Historic Structure
8 Report, if you're familiar with them or seen some of
9 the formats, is that something that we could start
10 looking at to apply to historic large museum ships
11 before any work goes ahead?

12 MR. DAVID BRINK: I am not that familiar with
13 the specifics of them, but the thing that is so
14 important is getting any organization that wants to do
15 something to address the plan and spend money on
16 planning.

17 One organization will go nameless that we
18 casually consulted with after our Elissa experience, we
19 said, "Look, the thing we learned, more than anything
20 else, is planning." If you plan the goal, and then we
21 are back to what Walter said, if you get your planning
22 done and spend your money there, the program will go
23 much more swimmingly than if you just kind of wander
24 about. The organization said, "Great! Fantastic! We
25 will do that." The guy sat down at his typewriter, and

1 two days later had his plan.

2 Well, it isn't that kind of a process.
3 Planning is expensive. It takes surveys. It takes all
4 kinds of experts. It takes a structure. It takes a
5 formalized document, and, in some cases, requires
6 hauling a ship, et cetera, before you get to the point
7 where you know what you've got and, most importantly,
8 maybe a little bit different in the sense of NPS here,
9 but for most of us, it also relates to the definition
10 of how much money is going to be needed to underwrite
11 the plan. You can't go out and start raising money in
12 a capital campaign until you can deliver for "X" number
13 of dollars that hopefully someone's going to give you
14 to do the project. And God help you if you're not
15 relatively accurate. And that speaks to Elissa as not
16 being very accurate, which went from an initial
17 estimate of 400-and-some-odd thousand dollars to over
18 \$4 million, and I am sure you can all fill in the
19 blanks of the various projects you have been associated
20 with.

21 But the big point is, be it that kind of a
22 report or if it's an independent organization, the big
23 thing is to do thorough planning. Thorough planning
24 probably for an Elissa project of \$4 million might
25 really, idealistically be in the neighborhood of

1 \$100,000, \$250,000 worth of planning. It's real hard
2 for folks that have a scaley old boat that they're
3 trying to keep afloat, but knowing that that boat is a
4 four million, three million dollar project, it's real
5 hard for them to get that money up and throw all that
6 money into consulting and paper and end up with a stack
7 of crap -- that really no one wants to read -- to get
8 to the truth.

9 The problem is, most of us, in my opinion,
10 will not face the truth about our vessels and our
11 programs and our plans and our goals. That is the
12 toughest nut I think any of us have to face, whether
13 it's in a specific structure or a rather simple one.

14 MR. JAMES DELGADO: I think we are pretty
15 fortunate here to have one of the Park Service's
16 principal experts on historic structures reports who
17 perhaps can offer some thoughts on their applicability
18 to vessels, and that is Randy Biallas from our
19 Washington office.

20 Randy, I guess we will cast that question in
21 your direction.

22 MR. RANDY BIALLAS: The things you have been
23 talking about are generally elements of a historic
24 structure report. First they contain documentary
25 research into written materials, photographs, drawings,

1 that kind of thing. Secondly, they involve looking at
2 the structure itself and its physical condition,
3 usually done by two different disciplines. Historians
4 do the documentary research. The things I am used to
5 dealing with, historic architects do, the physical
6 research. And then, third, there are proposed scopes
7 of work, sometimes just one, but usually alternatives,
8 with price tags. And management, not the
9 professionals, is the one who makes the decision on
10 which of those are going to be chosen, if any.

11 Sometimes the alternatives are such things as
12 demolition, too; let it go. Is it worth the amount of
13 money? So, what you are describing is, in essence, a
14 historic structural report, regardless of what you want
15 to call it. We have been doing it since 1933.

16 MODERATOR McGRATH: Karl.

17 MR. KARL KORTUM: Dave and Randy, there is
18 another way to go without historic structures reports
19 and without this elaborate paperwork, and that is just
20 go ahead and do it, bring the talent into the picture,
21 if talent is available. That came to me very strongly
22 as we walked over here. And I have never, and the rest
23 of you must have had the same experience, I have never
24 seen the crowds in our famous Fisherman's Wharf as
25 dense as they were today. I have been in this city for

1 36 years.

2 We have an opportunity, without elaborate
3 planning -- I stress that. You don't have to knock
4 yourself out planning. I am not against it. But in
5 this case, some things become obvious. There are
6 opportunities to be seized, as Peter has indicated.

7 A short block and a half, maybe two short
8 blocks away, from that massive concentration of foot
9 traffic, which must only be -- I know it is only
10 rivaled by Disneyland -- we have a pier that the Park
11 Service leases, and in time, may own. We have a fleet
12 of ships, as the young lady indicates. We own them.
13 And if we can't pull ourselves together without
14 throttling ourselves in paperwork to create a splendid
15 scene on that pier with historic ships on either side
16 of it and draw on these 12 million people, move this
17 ship down to that pier so that we have one square
18 rigger, one three-masted schooner, one steam schooner,
19 one scow schooner, one ferryboat, one battle steamer,
20 one deep sea tug -- make that pier attractive and take
21 advantage of legislation -- that is, through the House
22 of Representatives and now moving into the Senate when
23 they return, which will allow us to charge to go on
24 that pier, to charge a fee to go on that pier.

25 What do we have to do to make all this happen?

1 A, we have to move this splendid vessel over there and
2 out of the miserable scene in which she is now, which
3 can be described as a parking lot, a sea of
4 automobiles, utterly inappropriate for a splendid
5 square-rigger from 1886. She joins the other ships in
6 a fine, fresh setting, with the sea breeze blowing in
7 through the Golden Gate. All we have to do
8 additionally is to make the pier, which is a scene
9 beyond description now, mediocrity -- that is the word,
10 "mediocrity" -- turn it into the appearance of an
11 old-time San Francisco pier, and start charging
12 admission and solve a lot of the local problems.

13 Now, that doesn't take a staggering amount of
14 planning. You can do it in two hours in the back of an
15 envelope. So, I speak for a different method than what
16 has generally been described here. I speak for talent
17 moving in fast, taking advantage of opportunities, as
18 we did saving this ship back in the 1950's, and getting
19 on with it and moving ahead and making money.

20 [Applause]

21 MR. DAVID BRINK: May I respond to that?
22 Karl, as you know, that, first of all, is a plan, and
23 we talked with your organization over two and a half
24 years. But in the process of doing that, if you want
25 to have a fleet here in ten years to charge an

1 admission to, you damn well better find out what you
2 got, what's wrong with what you got, and how much it's
3 going to cost you if you are going to go back to your
4 favorite provider, the federal government. Because in
5 a sense, as we all know, as we discussed here in the
6 last day, they called you. They said: You don't have
7 a plan. You don't know what the hell you got, and you
8 don't know what's wrong with it. You tell us and you
9 prove the case to us, and we will make that dream that
10 you are going to do on the back of an envelope come
11 true.

12 MR. KARL KORTUM: Well, that is true. The
13 signals that have gone to Washington, D.C., the source
14 of our lovely federal funds, have apparently been
15 unclear. Why they are unclear is not clear to me.

16 MR. DAVID BRINK: And, Karl, I would suggest
17 that if you're looking for support in conjunction with
18 that from the National Museum Association, that the
19 donors, the private donors that we know exist in this
20 town, who, quite frankly, haven't been hit up since you
21 stopped being the national or the San Francisco
22 Maritime Museum, when you could fund this, they're
23 sitting out there with all these pools of maritime
24 money in their pocket -- they, too, are sophisticated
25 donors, and any of us who are dealing in that private

1 market will also realize that the competition is
2 getting greater for the money. You have got to have
3 your you-know-what together if you are going to want to
4 draw down big money, be it private or public money.

5 The dream is easy, and I am all for it, the
6 dream of action. I am not oriented, as Randy and a
7 number of the Park Service people here are, to
8 elaborate planning in the sense of historic structure
9 reports. It's not where I come from. But you've got
10 to strike a balance. If you don't strike a balance,
11 you're not going to get the broad-based support you
12 need to to create your dream.

13 MR. KARL KORTUM: I don't see any difficulty
14 in doing a certain reasonable amount of planning for a
15 vessel, looking to the future for that ship. That is
16 all right. But it shouldn't stand in the way of
17 getting on with things. That is my whole point.

18 MR. DAVID BRINK: I agree. And as you know, I
19 am one of the more impatient ones who wants to get on
20 with it. But you still have to do your homework.

21 MR. RANDY BIALLAS: I am curious about the
22 discussion about fees, visiting fees, and what effect
23 that has on your total visitation and what experience
24 other museums beyond the museum here have had with that
25 issue. How high can you raise the visiting fee before

1 you have no visitation?

2 MR. PETER NEILL: Mystic Seaport, which has
3 the largest maritime museum attendance in the country,
4 charges \$9 per entry. South Street Seaport, which had
5 375 admissions, charges \$4 per entry. Mariner's Museum
6 is free but has a huge endowment. Are they starting to
7 charge?

8 MR. JAMES DELGADO: Yes.

9 MR. PETER NEILL: All right, \$9. So that
10 would be the highest.

11 MR. RANDY BIALLAS: What do you think we could
12 get away with here to see all the ships, just off the
13 top of your head?

14 MS. LYNN HICKERSON: If they were together.

15 MR. DAVID BRINK: And restored?

16 MR. RANDY BIALLAS: Yes. And restored.

17 MS. LYNN HICKERSON: And interpreted.

18 MR. DAVID BRINK: And some of them sailing?

19 MR. PETER NEILL: I use the price of a
20 first-run theater ticket as my guideline.

21 MS. LYNN HICKERSON: A what?

22 MR. PETER NEILL: Like \$5, \$6.

23 MR. PETER NEILL: Yes. If it costs \$4.50 to
24 go to the movie, I think you could get the same amount.

25 MODERATOR McGRATH: Pardon me. We are moving

1 along very quickly, but I would like to still maintain
2 the ability to recognize people. Marcy Hooper.

3 MS. MARCY HOOPER: How many people does Mystic
4 get in a year and how many people do you get in a year
5 at your prices? Considering the fact you have harsh
6 winters.

7 MODERATOR McGRATH: I would like to have Dana
8 Hewson from Mystic Seaport answer that question, if you
9 could repeat it. Did you hear it, Dana?

10 MR. DANA HEWSON: Yes, I heard it. I don't
11 know the total figure for the year, but it's not
12 uncommon for us to have between three and four thousand
13 people a day in the summertime.

14 MR. PETER NEILL: It's just under 500,000
15 visitors a year, I was told.

16 MR. JAMES DELGADO: Bear in mind, for us to do
17 that here, there are certain considerations that need
18 to take place. Mystic Seaport and South Street Seaport
19 not only have ships berthed in facilities, but they
20 also have some land support in terms of structures,
21 particularly Mystic Seaport.

22 I think that before we move in that
23 direction -- again, I am not speaking policy here, but
24 it would seem to me individually that we would need to
25 do a bit more development and perhaps go ahead and

1 complete our plans to turn the Haslett warehouse into a
2 major visitor center and new museum and perhaps link
3 other structures to it. Because there needs to be some
4 sense of continuity in the museum complex, because we
5 start losing control of the visitors and perhaps lose
6 admissions with our scatter approach right now.

7 MR. KARL KORTUM: This has nothing to do with
8 the Haslett building, nothing whatsoever.

9 MODERATOR McGRATH: We had a question. John
10 Wiznuk had a question -- from Canada. John.

11 MR. JOHN WIZNUK: I wanted to state the
12 obvious here, that's being done around the fringes but
13 has not had its finger put right on it. People love
14 these ships. The romance of the sea has not diminished
15 since these ships went to sea. That is why people want
16 them. That is why the federal money is coming in.

17 I don't think it should be decided by
18 bureaucrats. You're getting people voting with their
19 feet coming on this thing. They want it. Our job is
20 to do it. Just a statement of the obvious.

21 MR. PETER NEILL: Let me just, so we don't get
22 hung up on one system over another. In my mind, the
23 best preserved ships are the ones that are working.
24 And they can work tied up to the pier or they can work
25 when they're untied from the pier and they go sailing.

1 Pioneer, a hundred-year-old schooner, generates \$75,000
2 a year in income. Probably the best maritime
3 preservation in the country is going on in the North
4 End Shipyard, where there are five, six, or seven of
5 the windjammer fleets -- not under the auspices of a
6 maritime museum -- simply taking people out sailing.
7 They are building new schooners. They are renovating
8 old schooners. And they are making their way as they
9 go day by day.

10 That is because they have discovered a kind of
11 work that is beneficial. I think that what we need to
12 do is to look at our ships and figure out how each one
13 of them is going to work, and then, if you have a
14 fleet, how they work together. Once you have then done
15 that, you begin to prorate or translate that into a
16 strategy. That strategy may be charter, that may be
17 admission, that may be this and that may be that. Then
18 there follows a series of detailed plans that go along
19 to get you there.

20 MODERATOR McGRATH: Wait a second. There's
21 just so much room on the back of an envelope. How are
22 you going to get all that on the back of an envelope?

23 MR. PETER NEILL: A legal envelope.

24 MR. JAMES DELGADO: There is a point we are
25 missing here, I think, and that is, getting back to

1 standards, are we going to commit to having vessels
2 working and actively staying in the water and
3 committing ourselves, then, to what Alan Billier said
4 happens to a vessel in that situation? It becomes
5 either a wreck or a replica.

6 When do we start preserving the actual
7 craftsmanship in the material? When do we start doing
8 that? I mean, do we do that only in archeological
9 contexts, or if we get a vessel in mint condition, do
10 we say, "it shall be preserved without alteration"? I
11 just throw the question out.

12 MR. KARL KORTUM: We have been talking about
13 that all day.

14 MR. PETER NEILL: You got to send them sailing
15 or you got to make them work. The point is that they
16 have to earn their keep. And you have to conceive them
17 in that context.

18 MR. JAMES DELGADO: The Pioneer isn't a
19 hundred years old.

20 MR. PETER NEILL: She is 150 years old and she
21 is still sailing, by God.

22 MR. DAVID BRINK: She's twelve years old,
23 because you sank her and got the bid everybody got
24 offered, and you built a new one out of her, and it's
25 Pioneer II. And by that time, 50,000 people have gone

1 on board, loved her, paid her, and she is contributing
2 positive income back into South Street. She works.

3 MR. PETER NEILL: This whole business of
4 fabric. Let's get around to that again. I mean, I
5 tried to read that statement, and, Randy, maybe I did
6 take it out of context a little bit. But the idea, as
7 I understand it -- and I am not the historian -- but as
8 I understand it, ships built of that era, the wooden
9 boat era, were built to be renewed. It was inherent in
10 the design of the ships, that they would deteriorate
11 and would be renewed. And, in fact, it was the concept
12 that allowed them -- it was their vitality. It was
13 cheap material that could be replaced. There were
14 plenty of artisans who were there who knew how to do
15 the job.

16 So, in fact, the fabric you are talking about
17 is, by definition, renewable. And so this whole notion
18 of saying that we are going to spray the ship in some
19 kind of epoxy that makes it forever frozen in time is a
20 real philosophical contradiction to the spirit of
21 rehabilitation as you define it.

22 MODERATOR McGRATH: We had another question in
23 the rear. Tom.

24 MR. TOM WICKS: I think we have come full
25 circle. I was about to say the conversation had

1 degenerated from the ethics involved in the
2 preservation of historic vessels to a matter of finance
3 and money, which we all know we need for various things
4 and various degrees.

5 However, it seems to me that Karl's point of
6 going on with things should be well taken by everyone
7 here. Apparently we are supposedly an assemblage of
8 experts. I think this idea, this concept of experts
9 must be dealt with in some way, at some time. You
10 know, law and medicine are both considered very
11 conservative and slow-moving. But in a sense they have
12 made the path for us all. As there have been more
13 specialists in law and in medicine, in particular, we
14 in the modern age have decided we must confer with
15 experts.

16 Well, I would say that every two dollars that
17 you spend on an expert is perhaps seven or eight in
18 your vessel. So should one get on with splashing the
19 red lead along with documentation of various rust
20 streaks on a rail -- I think that's a good idea. So
21 that is less of question than a statement.

22 But I think we should consider "expert"
23 sometime during this seminar, and we should probably
24 avoid consideration of finance and money, how much can
25 we make and how much do we need.

1 MODERATOR McGRATH: What I think you have
2 brought up, Tom, is perhaps when we discuss
3 maintenance. I would suggest --

4 MR. TOM WICKS: It's a matter of ethics,
5 actually, not maintenance.

6 MODERATOR McGRATH: Well, when you're --

7 MR. TOM WICKS: When you maintain your vessel,
8 you can keep on trucking.

9 [Laughter]

10 MODERATOR McGRATH: John Conway.

11 MR. JOHN CONWAY: My question is: When you
12 define a working vessel, isn't a museum ship, such as
13 the Balclutha, working just sitting alongside the pier
14 drawing people aboard, earning whatever keep she might
15 earn?

16 And also, the zoo down here, the three-ring
17 circus, people will pay -- I don't know what they pay
18 to get into Guinness' world records, wax museum,
19 whatever. If they will pay that money to go in there,
20 why won't they pay an equal amount or even less to come
21 on board the Balclutha?

22 FROM THE FLOOR: They can see it from the
23 dock.

24 MR. PETER NEILL: Remember also that they're
25 paying already because their tax dollars are paying the

1 salaries of the people who are working here.

2 MR. DON BIRKHOLZ: Today we have seen some of
3 the problems that the NPS is facing with their fleet of
4 ships. We have also seen how various projects have
5 dealt with their problems in the past more or less
6 successfully.

7 What I would like to do is ask the
8 participants what problems you're facing. I really
9 don't know what stage your projects are in, whether
10 some of them are still in the planning phase, whether
11 you are well into your projects. But I'd like to hear
12 from you what your problems are, what your concerns
13 are, and what you'd like to get out of this conference.

14 MODERATOR McGRATH: Just dinner? Glennie
15 Wall.

16 MS. GLENNIE WALL: I am not going to respond
17 to your question because you know what our problems are
18 and you know where we are. But I think, like all of
19 you, I have been struggling with this idea of
20 restoration versus preservation. What do we restore?
21 What do we preserve? What level of planning do we
22 need? And you can get yourself hyped up into a lot of
23 spirals on this.

24 I guess this is just throwing it out. I am
25 not trying to make a pitch -- or maybe I am making a

1 pitch. But I think there are two things that seem very
2 true to me. One is that if we have a vessel, like the
3 Balclutha, and we maintain her in the traditional way
4 using traditional materials and the skills, that is a
5 dynamic preservation there. It's not just the vessel.
6 The vessel alone is iron and steel and wood. It's
7 nothing. But the vessel, with the skills, the people
8 doing the work, and the experience of being aboard,
9 this is what it's about with a vessel like Balclutha.
10 That is one thing.

11 Then there is another vessel, like the
12 Victory. This vessel has associative significance. It
13 would be criminal to destroy the material on which
14 Nelson actually walked. That is different. People
15 should walk on it. You know, it's something else
16 again.

17 MR. DAVID BRINK: They're doing it every day.

18 FROM THE FLOOR: They're putting new, good
19 wood in there.

20 MR. DAVID WALKER: If Nelson could come back
21 today, he would find a little piece of wood that he
22 died on. That is all of the original picture that is
23 left. The masts are metal. The guns are fiberglass.
24 But all with good reason. The guns were taken off and
25 they were replicated. All these things have been done

1 with good reason. But it is not the Victory that
2 Nelson sailed on. It is a memorial to Nelson.

3 MODERATOR McGRATH: On that note, I would like
4 to finish today's session. I am sorry we don't have
5 any more time to continue.

6 [Whereupon, the session adjourned at 5:40
7 o'clock p.m.]

8 ---o0o---